

FTA TITLE VI PROGRAM

Connecticut
Department of Transportation
FFY 2021 - 2023



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Introduction

Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving Federal financial assistance. Specifically, Title VI provides that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." (42 U.S.C. Section 2000d).

The Connecticut Department of Transportation (CTDOT) is committed to ensuring that no person is excluded from participation, denied benefits, or otherwise subjected to discrimination under any program or activity, on the basis of race, color, national origin.

The Connecticut Department of Transportation (CTDOT), a designated recipient of Federal Transit Administration (FTA) funding, is responsible for service and planning decisions for rail, fixed-route bus, and complementary paratransit service throughout the State of Connecticut. The Governor has designated CTDOT as the agency responsible for administering Section 5310, enhancing mobility of seniors and individuals with disabilities; Section 5311, supporting public transportation in rural areas; and 5307 supporting public transportation in urbanized areas. The CTDOT does not administer the Section 5307 program for the entire state as several transit districts are direct recipients of FTA funding and required to report directly to FTA.

The information contained in this report is CTDOT's Title VI Program for the period of October 1, 2020 – September 30, 2023. CTDOT is scheduled to submit its next program by October 1, 2023. The Title VI Program has been prepared in compliance with the requirements set forth in U.S. Department of Transportation Federal Transit Administration (FTA) Circular 4702.1B, "Title VI Requirements and Guidelines for Federal Transit Administration Recipients." The program was accepted on November 9, 2020, with the approval of Commissioner Joseph Giulietti, as evidenced in the Title VI Program Approval on page 3 of the CTDOT FTA Title VI Program Appendix.

CTDOT will effectuate and ensure full compliance with the provisions of Title VI of the Civil Rights Act of 1964, as amended (referred to as Title VI), 49 CFR Part 21, and 23 CFR Part 200, and related statutes and regulations in all Department programs and activities.

The program was developed by the CTDOT Title VI Workgroup. The group's membership consists of agency personnel from the Bureaus of Public Transportation, Finance and Administration, and Policy and Planning; and the CTDOT's Title VI Coordinator and Associate Title VI Coordinator.

Notifying Beneficiaries of their Rights under Title VI

The Connecticut Department of Transportation (CTDOT) operates its programs and activities without regard to race, color and national origin. The CTDOT has developed a Title VI Notice to the Public to provide notification to beneficiaries of their rights under Title VI and the procedures to follow when filing a Title VI complaint.

Notices are posted in areas such as:

- CTDOT Bulletin Boards

- Rail stations
- Bus stations
- Transit Vehicles
- Public Meetings/Hearings
- CTDOT Website

The CTDOT has translated the notice, in its entirety, into Spanish. To ensure that LEP populations are aware of their rights under Title VI, the statement below is included in Portuguese, Polish, Chinese, Italian, French, Haitian Creole, Russian, Vietnamese, Arabic, Korean, and Hindi on the English version of the Notice.

“The Connecticut Department of Transportation (CTDOT) operates its programs and activities without regard to race, color, or national origin. This is a notice informing the public of their rights under Title VI, including how to file a Title VI complaint, and how to request additional information regarding the Department’s Title VI Program. If this form is needed in another language, please contact CTDOT at (860) 594-2109.”

English and Spanish versions of the notice can be found on pages 4-10 of the CTDOT FTA Title VI Program Appendix.

CTDOT requires that all subrecipients develop a Title VI Notice to the Public and post the notice on their website and in areas accessible to the public, including any federally funded vehicles. On a rotating basis the Department audits its sub recipients to confirm they have a Title VI Notice to the Public and the notice is posted in areas accessible by the public, including but not limited to their websites.

The public can access Title VI information on CTDOT’s website by clicking on the link [Title VI Program](#), under “Most Popular”. In addition to resources for subrecipients, the Title VI webpage hosts the following documents:

Connecticut Department of Transportation Title VI Policy Statement – This policy affirms that CTDOT prohibits discrimination on the basis of race, color and national origin in its programs, benefits and activities. Information identifying who has been delegated the responsibility of implementing and monitoring the CTDOT’s Title VI program is also provided. The policy is signed by the Commissioner, emailed to all agency employees, and posted on CTDOT’s website. A copy of the Title VI Policy can be found on pages 11-13 of the CTDOT FTA Title VI Program Appendix.

Title VI Complaint Form – This form can be used by the public to file a Title VI complaint. While the public is not required to use this form to file a Title VI complaint, it is encouraged. Using the form ensures that the necessary information to initiate an investigation is captured. The public can access the Title VI complaint form by visiting the CTDOT website and clicking the link [Title VI Program](#) under “Most Popular”.

The CTDOT has translated the form, in its entirety, into Spanish. To ensure that LEP populations are aware of their rights to file a complaint under Title VI. The following statement is included in Portuguese, Polish, Chinese, Italian, French, Haitian Creole, Russian, Vietnamese, Arabic, Korean, and Hindi on the English version of the Notice.

“A Title VI Complaint may be filed by any individual or group that believes they have been subjected to discrimination based on their race, color, and national origin. The Title VI complaint form may be used for filing a

Title VI complaint with the Connecticut Department of Transportation (CTDOT). This form also explains the procedures the Department follows when investigating a Title VI complaint. If the form is needed in another language, please contact the CTDOT at (860) 594-2243."

English and Spanish Title VI Complaint Forms can be found on pages 14-21 of the CTDOT FTA Title VI Program Appendix.

FTA Title VI Complaint Investigation Process and Procedure

What is an Investigation: An investigation is an official inquiry for the purpose of determining whether there has been a violation of the laws or statutes and includes a determination of appropriate relief where a violation has been identified. An investigation requires an objective gathering and analysis of the evidence, which will ensure that the final decision is as accurate as possible.

Role of the Investigator: The investigator is a neutral party provided by the agency to investigate the issues raised in a complaint. The investigator's behavior, demeanor, and attitude reflect the agency and may affect the degree of cooperation received from the parties. The investigator has an obligation to identify and obtain relevant evidence from all available sources in order to resolve all the issues under investigation. ***The investigator is not an advocate for the complainant or the respondent.*** The investigator is a neutral fact finder.

Responsibilities of the Investigator:

The Investigator MUST:

- Never express his/her opinions;
- Never tell the parties that the complaint represents a good case or that the complaint is frivolous;
- Always remain NEUTRAL DO NOT take sides;
- Write the FACTS. State what the facts are based upon the evidence or testimony;
- Stay in control at all levels of the process;
- Decide who is to be interviewed. If the complainant or the respondent is adamant about a witness interview, perform the interview;
- Decide when sufficient evidence has been gathered to begin writing the investigative report;
- Always remain professional and polite;
- Be patient; and
- Be a good listener.

Theories of Discrimination: A Theory of Discrimination refers to the type of discrimination:

- INTENTIONAL DISCRIMINATION/DISPARATE TREATMENT – The decision maker was aware of the complainant's race, color, or national origin, and acted at least in part because of that information. The action was taken because of the complainant's race, color, or national origin,
- DISPARATE/ADVERSE IMPACT – Discrimination which occurs when a neutral policy or procedure has a disproportionate impact on a protected class. The practice, even though applied equally to all, has the effect of excluding or otherwise adversely affecting a particular group; and
- RETALIATION – Discrimination against persons because of the filing of a complaint, participation in an investigation, or opposing a practice made unlawful pursuant to the laws.

Elements of Proof: How does the investigator prove discrimination?

- Establish a Prima Facie Case – The complainant has the responsibility of initially establishing a prima facie case of discrimination. A prima facie case means the complainant has provided information containing all the elements necessary for a complaint of discrimination. Establishing a prima facie case requires the following elements:
 1. Complainant is a member of a protected group;
 2. Complainant was harmed by some decision; and
 3. Similarly situated persons of a different group were not or would not have been harmed under similar circumstances.

These elements constitute an ideal complaint of discrimination and establish a prima facie case. However, in many situations, the investigator will not initially have all these elements. It is the investigator's responsibility to obtain from the complainant all missing information.

- During the investigation – One of the first items that must be determined by the investigator from the respondent, are the reasons for the respondent's actions against the complainant. In other words, establish the respondent's legitimate non-discriminatory reasons for the actions taken against the complainant. The investigator must also obtain evidence to determine whether the respondent's reasons are true based upon the evidence or whether the reasons are an excuse (pretext) to discriminate against the complainant.
- Obtaining the evidence -- During the investigation, the investigator should obtain the following types of evidence:
 - Respondent's policies and procedures;
 - Evidence establishing actions taken against the complainant;
 - Evidence establishing how others, not in the complainant's group, were treated in similar situations;
 - Evidence establishing the normal policies and procedures and how the respondent followed or did not follow the normal policies and procedures when making the decision or taking action involving the complainant;
 - Evidence establishing whether the respondent followed the normal policies and procedures for similarly situated persons; and
 - A position statement from the respondent outlining the reasons for the action taken against the complainant.

Examples of Elements of Proof:

Intentional Discrimination –

- Complainant is a member of a protected group;
- Complainant was excluded from participation in or denied the benefits of a program or activity receiving federal financial assistance;
- Complainant was rejected despite his/her eligibility;
- Respondent selected applicants whose race, color, or national origin were different from the complainant; or

- The Program remained open and the respondent continued to accept applications from applicants of a different race, color, or national origin than the complainant.

Disparate/Adverse Impact –

- Respondent has a facially neutral policy or practice that has affected the complainant;
- The policy or practice operates to disproportionately exclude members of the protected group;
- The policy or practice is a business necessity; or
- There is an effective business alternative with a less adverse impact.

Retaliation –

- Complainant opposed any policy or practice made unlawful or participated in any manner in an activity pursuant to the laws prohibiting discrimination;
- The individual who allegedly retaliated against complainant knew or should have known of the opposition or participation;
- An adverse action was taken against the complainant subsequent to the protected activity;
- There was a ***causal connection** between the opposition or participation and the decision made involving the complainant;
- There was a legitimate non-discriminatory reason for the action taken; or
- The articulated reason is a pretext for retaliatory discrimination.

**Causal Connection:* To establish a causal connection, establish the following:

- Did the treatment of the complainant change after the protected activity;
- Timeline: How long after the initial protest did the adverse action occur; and
- Compare the complainant's treatment with others who were not engaged in the protected activity.

Tracking and Investigating Title VI Complaints - All Title VI complaints will be filed in accordance with the following Title VI Complaint Procedures:

Any person alleging to be aggrieved by a discriminatory practice may in person or through a legal representative, obtain a Title VI Complaint Form, and file the completed form with the Title VI Coordinator within 180 days following the date of the alleged discriminatory action or the date when the person(s) became aware of the alleged discriminatory action.

Complaints will be referred to the Department's Title VI Coordinator. The Title VI Coordinator will review the complaint and inform the appropriate program area designee. Complaints must be in writing, signed by the complainant or a representative, and include the complainant's name, address, and telephone number, or other means by which the complainant may be contacted. Complaints shall explain as fully as possible the facts and circumstances surrounding the alleged discriminatory action and identify the individual(s) and/or organization(s) responsible for the alleged discriminatory action. In cases where the complainant will be assisted in converting an oral complaint into a written complaint, the complainant is required to sign the written complaint. All discrimination complaints will be acknowledged in writing. Complaints received by telephone will be reduced to writing and provided to the complainant for confirmation, revision, and signature before processing.

The Title VI designee or the individual receiving the written complaint will review the complaint to ensure that the required information is provided, the complaint is timely, and is within the appropriate jurisdiction. The complaint will be accepted unless it is withdrawn, is not filed within the allowed time period, or the complainant fails to provide required information after a written request for omitted/ additional information.

Internal Complaint Procedures: Written complaints filed with the Department will be analyzed and investigated by the Title VI Coordinator. The Department will notify a respondent named in a complaint by mail and the respondent will be contacted for an interview. The complaint investigation will be completed within forty (40) days of the date of receipt of the complaint. The Title VI Coordinator will prepare an investigative report (IR) after conducting the investigation. A complaint log will be maintained for all complaints filed with and investigated by the Department. The investigator will advise the complainant of his/her rights under Title VI, and related statutes.

Investigation Process: The Investigation Process includes the following:

- Investigative Plan
- Request for Information
- Conducting Interviews
- On-Site Visit
- Obtaining Evidence
- Analyzing Data
- Writing the Investigative Report

Investigative Plan: The Investigative Plan is an internal document for use by the investigator to define the issues of the complaint. The following elements are contained in an Investigative Plan:

- Complainant(s) Name and Address/Attorney for Complainant with Name and Address;
- Respondent(s) Name and Address/Attorney for Respondent with Name and Address;
- Applicable Law;
- Basis;
- Issue(s);
- Background;
- Name of Person(s) to be interviewed, including questions for the Complainant, Respondent and Witness(es); and
- Evidence to be obtained during the investigation.

Request for Information: Requests for Information are sent to the appropriate official(s) at the respondent's facility. Contact is made with the respondent to advise him/her of the complaint and to determine the appropriate official(s) to interview. The cover letter to transmit the Request for Information should explain the process and provide information regarding any meetings that have been scheduled. To facilitate the availability of evidence during the on-site visit, provide the Request for Information to the respondent prior to conducting the visit.

Conducting Interviews: Interviews are conducted of witnesses who can provide information that will either support or refute complaints. A list of major questions should be prepared that address the issues involved in the complaint. During the interview, the following steps are recommended:

- Introduce yourself and outline the interviewing process;
- Place the person being interviewed at ease;
- Listen effectively;
- Differentiate factual information from opinions;
- Ask questions best worded to provide factual responses;
- Take clear and precise notes; and
- Obtain a signed statement from the person being interviewed.

Complainant – The purpose of interviews is to gain a better understanding of the situation outlined in the complaint of discrimination. The investigator contacts the complainant to ensure that he/she understands the complainant’s allegation(s). It is recommended that the investigator interview the complainant prior to preparing the Investigative Plan. If this is not possible, changes are made as appropriate to the Investigative Plan based upon any new information provided by the complainant.

Respondent – Respondents are interviewed to provide an opportunity to respond to the allegations raised by the complainant as well as to provide the investigator the opportunity to understand the respondent’s operation or policies the complainant cites in the complaint. You will need to discuss the Request for Information with the respondent and be able to explain the need for requesting any document on the list. The respondent is informed of their right to submit a formal position statement addressing the complainant’s allegations. The investigator may also question the respondent regarding possible settlement opportunities.

Witnesses – The complainant or respondent may request that additional persons be interviewed. Determine what relevant information, if any, a witness must provide prior to conducting an interview. Only interview persons who have information relevant to the allegations raised in the complaint of discrimination.

On-Site Visit - An On-Site visit will be conducted when:

- Personal contact with the complainant and the respondent may yield information and clarification that might not otherwise be discovered by only reviewing the written documents or by telephone contacts;
- It is necessary to review the physical environment;
- More effective communication can be established with representatives and witnesses of the complainant and respondent; and
- Documentation can only be examined on-site for reasons of convenience, cost, format, or volume.

Obtaining Evidence - Evidence requested should be related to issues cited in the complaint. An evidence request should contain some or all of the following:

- The policies and procedures regarding the practice that complainant has alleged;
- All documents relating to the Respondent’s dealing with the complainant in the situation described in the complaint;
- Documents which exhibit how others, not in the complainant’s group, were treated under similar circumstances;
- Respondent’s reason(s) for the action taken; and

- A formal position statement from respondent addressing complainant's allegations.

Types of Evidence include the following:

- Circumstantial Evidence – Includes facts from which may be inferred intent or discriminatory motive and proves intent by using objectively observable data;
- Comparative Evidence – A comparison between similarly situated individuals;
- Direct Evidence – Related to the Respondent's motive, it is defined as any statement or action by an official of the Respondent that indicates a bias against members of a particular group;
- Documentary Evidence – Written material generated during the course of normal business activity;
- Statistical Evidence – Statistics, facts, or data of a numerical type, which are assembled, classified, and tabulated so as to present significant information about a given subject; and
- Testimonial Evidence – Evidence that is provided orally.

Analyzing Data - Data will be analyzed to determine whether a violation has occurred. When analyzing data, you must:

- Review what happened to the complainant;
- Compare the complainant's treatment with the appropriate policies and procedures;
- Compare the complainant's treatment with others in the same situation;
- Review the respondent's reason(s) for the treatment afforded the complainant; and
- Compare the respondent's treatment of the complainant with the treatment afforded others.

Writing the Investigative Report - The Investigative Report (IR) will contain the following sections:

- Complainant(s) Name and Address
- Respondent(s) Name and Address;
- Applicable Law;
- Basis;
- Issues;
- Findings and a corresponding conclusion for each issue;
- Recommended decision; and
- Recommendations (if applicable)

Transit Related Title VI Complaints, Investigations, and Lawsuits

The Connecticut Department of Transportation (CTDOT) and Metro-North Railroad have developed a system for determining which organization would investigate and report complaints relative to New Haven Line rail services. All complaints occurring on the New Haven Line are investigated by Metro-North Railroad.

All complaints where the complainant's trip origin was Connecticut will be reported to FTA by CTDOT; and all complaints where the complainant's trip origin was New York will be reported to FTA by Metro-North Railroad. Metro-North Railroad continues to provide notification to CTDOT on a quarterly basis of any Connecticut complaints filed and the status of active and pending complaints. CTDOT reports all complaints related to CTtransit, the Hartford Line, and Shore Line East Service.

Complaints filed during the reporting period, January 1, 2017 – December 31, 2019, are reported on the CTDOT Title VI Complaint Log, located on pages 22-23 of the CTDOT FTA Title VI Program Appendix.

Public Participation Plan

The Public Involvement Procedures are a proactive guide to public participation to ensure that the Department provides complete information, timely public notice, full public access to key decision-making points, and an opportunity for early and continued involvement. The PIP includes a process for identifying and addressing the needs of populations that have been traditionally underserved by transportation systems. The PIP also codifies a uniform public engagement process for CTDOT staff and consultants, when planning and executing any and all public engagement activities.

CTDOT recently updated its Public Involvement Procedures (PIP). The update was an agency-wide effort and included a public comment period from August 24, 2020 – October 9, 2020. The updated PIP can be found on pages 24-151 of the CTDOT FTA Title VI Program Appendix.

The updated document includes a chapter that details the requirements for public engagement activities, including outreach methods to engage minority and low-income populations and Limited English Proficiency (LEP) individuals. The updated PIP also includes a chapter that offers best practices, tool and techniques for engaging Title VI populations. A roll out plan for the new PIP will be initiated by the Bureau of Policy and Planning, in conjunction with the Office of Contract Compliance.

Summary of Outreach Efforts

The Connecticut Department of Transportation, through *CTrides* and *CTtransit*, conducted numerous outreach events targeting minority, LEP, and low-income populations. Below is a list of outreach events conducted during the reporting period. Outreach material examples are included on pages 152-173 of the CTDOT FTA Title VI Program Appendix.

3PL Worldwide: 3PL Worldwide is a provider of third-party logistics to direct response, E-Commerce and catalog marketers. *CTrides* continues to work with 3PL to develop a comprehensive commuter program for employees. Due to the high number of Spanish LEP employees, *CTrides* and 3PL are working to identify opportunities to bring Spanish language commuter education programs.

Advance Auto Parts: During the reporting period, *CTrides* partnered with Advance Auto Parts after the company opened a new warehouse in Enfield, and since 2014 has hired over 500 employees. *CTrides* is working with Advance Auto Parts to develop a transportation program as parking at the facility is minimal, and most employees are low-wage workers.

All our Kin: All Our Kin is a New Haven non-profit focused on developing local home daycare providers through training, education and accreditation. All our Kin has a significant number of minority and/or low-income employees and focuses on “greener” practices, partnering with *CTrides* to promote public transportation opportunities and carpooling.

Amazon Delivery Station - Stratford: Amazon has a diverse population and many of Amazon's employees, at this location, are low income and part-time without access to a personal vehicle. *CTrides* has been working to assist employees without a personal vehicle to identify a carpool partner or a transit option. The goal has been to ensure that all employees have a reliable way to get to work.

Amazon Sorting and Fulfillment Centers: CTrides began working with Amazon in November 2016 with a commuter survey to identify issues associated with the employees commute to work and employee concerns. CTrides continued this partnership with over 44 events during the reporting period. Amazon has a diverse population and many of Amazon's employees, at these locations, are low income and part-time without access to a personal vehicle. CTrides has been working to assist employees without a personal vehicle to identify a carpool partner or a transit option. The goal has been to ensure that all employees have a reliable way to get to work.

American Institute (AI): American Institute is a post-secondary school in West Hartford, 60% of students utilize public transit. AI maintains a professional student base, with low income students working multiple jobs. During the reporting period, CTrides conducted a transportation survey to identify origination points.

American Job Center (New Haven): American Job Center helps transform job seekers into qualified candidates and connect them with employers of all sizes. CTtransit and CTrides conducted numerous outreach events, including disability awareness day, throughout the reporting period. American Job Center serves many minority and/or low income job seekers.

American School for the Deaf: The American School for the Deaf is the oldest permanent school for the deaf in the United States, and the first school for children with disabilities anywhere in the western hemisphere. During the reporting period, CTtransit held a transit fair for students to discuss transportation options.

AptarGroup: CTrides developed a partnership with AptarGroup a packaging manufacturer in Stratford with emphasis on sustainability. AptarGroup employs a significant number of minority, low income and LEP individuals. During the reporting period, CTrides provided AptarGroup with outreach materials in multiple languages.

The Arc of Litchfield County (LARC): Daily, LARC serves 220 individuals throughout Northwest Connecticut, many of them low-income. Services include residential group homes, in-home supports, transportation, day, and employment programs. During the reporting period CTrides provided LARC with a number of outreach materials.

Asnuntuck Community College: CTrides held ten events between 2017-2019. The two year college located in Enfield has a large population of low income students without ease of access to transportation. CTrides promoted the school's subsidy of bus passes and our own free commuter rewards program.

Branford Hall (Branford and Southington Campus): Branford Hall is a small for-profit school on a transit line in Branford CT. Branford Hall has a diverse student population with a significant population of low income and minority students. In September 2019, CTtransit participated in a tabling event to discuss transportation options with Branford Hall students. CTrides also conducts outreach events for Branford Hall students, and brings Spanish speaking staff to events to reach Branford Hall students who have limited English proficiency.

Branford Hall (Windsor campus): In September 2019, CTtransit hosted a table event at Branford Hall to discuss transportation options. Branford Hall serves multiple campuses with high numbers of minority and low-income students.

Bridgeport Fittings: Bridgeport Fittings is an electrical manufacturer in Stratford, Connecticut. As of October 2019, the company had 200 employees, many of which any are Spanish speaking and several of which are single mothers with access to vehicles. CTrides held two outreach events during the reporting period, and in both cases provided materials in Spanish.

Brookdale Senior Living Solutions: Brookdale offers a range of senior living and senior cares and employs a significant number of Spanish LEP individuals. During the reporting period, CTrides participated in outreach events with Brookdale, bring along Spanish translators and outreach materials in multiple languages.

Bridgeport Public Schools: During the reporting period, CTrides held an outreach event with Bridgeport Public Schools. Much of the staff are local to Bridgeport, a city with high populations of low-income, Hispanic, and African-American residents. CTrides provides literature in English and Spanish at all outreach events.

Capital Community College: Capital has a high minority population that uses public transit. During the reporting period, CTtransit participated in tabling events, a transit fair and the annual staff and student block party to discuss transportation options.

Capital Workforce Partners (CWP): Capital Workforce Partners is the North Central Region of Connecticut's primary workforce development organization, with a statewide reach in helping businesses find, retain, and grow qualified talent. During the reporting period, CTtransit partnered with CWP and attended the organization's annual disability fair.

Center for Latino Progress: Between 2017 and 2019 CTrides has held twelve (12) outreach events with The Center for Latino Progress. The program works with the Latino community in Hartford and provides educational opportunities and programs that promote financial sustainability. CTrides provided Latino and black youths with information on how to put their bikes on the bus safely and the various transit resources provided by CTrides.

Chabaso Bakery, Inc.: CTrides has been working with Chabaso Bakery since October 2016. The Chabaso workforce is approximately 75% Hispanic with many non-English speaking employees. CTrides has worked to ensure that all employees at Chabaso have access to CTrides services. CTrides has conducted a commuter survey, provided commuter resources and brochures and conducted educational sessions. All materials are provided in both English and Spanish and all educational sessions have a translator available to answer questions and translate commuter services information.

City of Bridgeport: CTrides held seven outreach events with the City of Bridgeport from 2017-20169. Audiences range from city employees to specific minority groups, namely Hispanic business expos. Bridgeport has high populations of low-income and minority populations. CTrides provides English and Spanish literature for all outreach activities.

City of Manchester: For five days in September 2019, CTtransit hosted an informational table the Manchester Town Hall. The event was intended to provide transit information to Manchester residents. In 2019, the census reports that 42.8% of Manchester residents are minority.

City of New Haven: During the reporting period *CTtransit* partnered with the City of New Haven on numerous outreach events. *CTtransit* participated in the city's annual Health and Wellness Fair. New Haven is home to a large minority and/or low-income population, many transit dependent.

City of Waterbury: In January 2018, Northeastern Transportation Company conducted outreach to residents of Prospect Gardens in the City of Waterbury. Waterbury has a large Hispanic, African American, and low-income population. *CTrides* assists mostly at events at or near City Hall, to reach employee populations and the general public as well. They provide general info handouts in English and Spanish at all events we serve and bring Spanish-speaking coordinators out to events.

Connecticut Children's Medical Center (CMCC): In December 2018, *CTtransit* hosted a tabling event at CMCC. CCMC employs a number of minority and/or low-income individuals. Between 2017 and 2019 *CTrides* held nine outreach events with CCMC. CCMC employs a number of minority and/or low-income individuals. *CTrides* has reached out to these individuals through tabling events and provided trial bus passes and commuter rewards for those using transit and those wanting to use transit. *CTrides* has also participated in safety and health fairs, which generally attract minority employees of lower income.

Connecticut Department of Labor (DOL): *CTrides* held two outreach events at the DOL between 2017-2019. The Department aids a large population of minority and low-income employees in the town of Wethersfield. *CTrides* was able to target these groups by promoting the *CTfastrak* line, located .3 miles from the office, and offering trip bus passes and distributing information on the free commuter rewards program.

Connecticut Department of Rehabilitation Services (DORS): *CTtransit* and *CTrides* maintain partnerships with DORS and attend outreach events to discuss transportation options. During the reporting period, *CTtransit* participated in DORS' annual Transition Symposium. Additionally, *CTrides* provided trial passes for transit services.

Connecticut Department of Social Services (DSS): DSS delivers and funds a wide range of programs and services as Connecticut's multi-faceted health and human services agency. DSS serves about 1 million residents of all ages in all 169 Connecticut cities and towns. DSS serves minority and/or low-income populations and remains an active participant in *CTrides* programming through event invitations and resource sharing. *CTrides* provided a number of outreach materials in multiple languages.

Connecticut Department of Veteran Affairs: During the reporting period *CTrides* and *CTtransit* partnered with CT Department of Veteran Affairs to reach and educate veterans on transportation options. Additionally, *CTtransit* participated in presentations and the annual Veterans Stand Down event.

Conning: *CTrides* maintains an active partnership with Conning, a global investment management firm serving the insurance agency, and located in Hartford Connecticut along the Hartford Line and multiple bus lines. Conning has a significant number of minority employees and continues to work with *CTrides* to establish an efficient carpooling program.

Continuum of Care Inc.: Continuum of Care Inc. employs caregivers from the neighboring, primarily minority Dixwell neighborhood in New Haven. *CTrides* developed a program to reward employees who are walking and riding the bus to work by promoting NuRide.

Eastern Account System, Inc. (EAC): During the reporting period *CTrides* held seven events with EAC. EAC's workforce is primarily made up of call center representatives that are minority and low income. *CTrides* identified clusters of employees coming from Bridgeport & Waterbury areas and held joint events with *vRide* to form vanpools based on location, population density, and employee clusters. *CTrides* also worked with the organization to distribute commuter information in English and Spanish to target different employee segments.

Gateway Community College: Gateway Community College has a large minority student population in Downtown New Haven. During the reporting period *CTtransit* participated in informational sessions to discuss the UPASS program, and new student orientation.

Global Steering Systems: Global Steering Systems is a manufacturer of steering components for the automotive industry in Watertown with 312 employees, as well as on-site temps from Randstad, an employee staffing service that brings in an additional up to 135 temps for peak production times. During the reporting period, *CTrides* hosted Meet Your Match events, targeted to second shift employees and provided customized outreach materials in multiple languages.

GoCT Card Outreach: During the reporting period, the CTDOT launched the GoCT Card program. The GoCT Card uses a system called Fare Capping to calculate fares and apply discounts. The GoCT Card provides the same discounts riders would receive with a pass, but the card and funds on it never expire providing the flexibility of cash and coins and the benefits of a multi-day pass without having to worry about rides going unused. To promote the GoCT Card, *CTtransit* conducted several outreach events around the State. A sample of the type of outreach conducted includes:

- Discussion at the annual disability resource fair.
- Outreach at heavily used bus stops in Hartford, New Haven, and Stamford.
- Presentation at the Blue Hills Neighborhood Revitalization Zone meeting in Hartford, CT.
- Informational session at the Hartford Public Library.

GoNHgo: *CTrides* has worked collaboratively with GoNHgo since its inception in 2013. GoNHgo encourages citizens and employees commuting into New Haven to avoid single occupancy vehicle use as often as possible. The City of New Haven is a diverse city with large populations of low income and minority populations. *CTrides* has supported GoNHgo by providing services at events and through promotional activities. These activities and events have targeted both employers and the community including those in New Haven's low-income areas.

Greater Bridgeport Transit (GBT): *CTrides* continues to partner with Greater Bridgeport Transit on outreach events, at various venues throughout the Greater Bridgeport area. Bridgeport has a large population of minority and low-income riders. GBT continues to participate in a 10-ride trial bus pass program to allow easier access for Bridgeport area residents to try transit.

Hartford Adult Education: The Hartford Adult Education Center is the official GED testing center for the City of Hartford. From 2017-2019, *CTtransit* hosted an informational table and informational sessions at the Center to discuss transportation options.

Hartford Foundation for Public Giving (HFPG): During the reporting period, *CTrides* established a partnership with the HFPG, which works to bring together the people, knowledge, investments and

passion to make Greater Hartford a more inclusive and positive place to live, work and raise a family. HFGP serves minority and/or low-income communities.

Hartford Job Corps (HJC): HJC is a federally funded trade school located on a bus line, where students without transportation are provided monthly bus passes. *CTrides* holds quarterly tabling events and are present at fairs.

Hartford Public Library: The Hartford Public Library is located on the dash shuttle route that connects to the Hartford Line and other express and local bus stops. During the reporting period, *CTrides* held five outreach events with Hartford Public Library. Hartford is home to a large population of both minority and low-income residents. *CTrides* developed customized marketing tools, in multiple languages.

Homes for the Brave: *CTrides* held two outreach events with Homes for the Brave between 2017-2019. This organization serves low-income, Hispanic, and African-American veteran populations. Their mission is to aide in job and home placement for homeless or displaced vets. Outreach occurs during Thursday "life skills" classes, where members of the organization have a chance to learn about important skills needed to assist them in finding living arrangements and jobs - transportation falls into this category. All outreach efforts include English and Spanish literature, and information is left with the site contact to have as a resource.

Housatonic Community College (HCC): *CTrides* has held six outreach events at Housatonic Community College between 2017-2019. HCC sees a large population of low-income and minority group students from the greater Bridgeport area. *CTrides* provides Spanish-language materials at any tabling event conducted at the college. Events are also held at multiple venues throughout the year ranging from welcome events to club fairs, in order to reach a wide range of students.

Horizon Services Company: Horizon Industrial Services, a small commercial cleaning contractor operating out of a tiny warehouse located on North Main Street in Manchester, Connecticut, employs a significant number of low-income employees who are reliant on public transportation. *CTrides* partnered with Horizon Services Company to provide information to employees during new employee orientation on carpooling opportunities, specifically for shifts outside of regularly scheduled transit hours.

Job Corps (Hartford): In August 2018, *CTtransit* participated in the Labor Day Festival for Job Corps Hartford. There is a large population of low-income minority students aged 17-24 who have not completed high school. The school helps them get their GED, trains them in a variety of fields, and helps them get placed in good jobs upon program completion.

The Kennedy Center, Inc.: The Kennedy Center serves clients who are mentally and physically disabled, disadvantaged and mostly minority. *CTrides* has partnered with The Kennedy Center since 2013 to provide transportation workshops along with the transit agencies for the towns they serve to provide commute alternatives, information about transit connections as well as NuRide. Three events were held during the reporting period.

PEP - Lacey Manufacturing: *CTrides* has held six events with PEP - Lacey Manufacturing between 2017-2019. Much of their population is low-income, Hispanic, African-American, and Asian-American. *CTrides* offers 10-ride trial bus passes, which provides more opportunities to walking populations to try a transit option. All outreach materials at this site are provided in English and Spanish.

Manchester Community College (MCC): *CTtransit* held two outreach events, including a transit fair, at Manchester Community College between 2017 and 2019. MCC has a high population of low income and minority students

Manufacturing Alliance Service Corporation (MASC): MASC is a NIMS Certified technical training center that develops programs for the manufacturing field in Waterbury, CT and has a significant number of minority and low-income employees. During the reporting period, *CTrides* partnered with MASC to provide transportation related materials to students. Materials were developed in multiple languages.

Middletown Works: Middletown Works, led by the Middlesex United Way and The Connection, has received a \$450,000 grant to reduce the percentage of Middletown single-parent families living at or below the federal poverty level from 35 percent to 20 percent over a 10-year period. During the reporting period, *CTrides* developed a partnership with Middletown Works providing outreach materials in multiple languages.

Mohegan Sun Casino: *CTrides* has hosted three events with Mohegan Sun for its employees. Many of Mohegan Sun's employees are minority and/or low income. *CTrides'* Spanish speaking staff was onsite for events and written materials were translated into Spanish, Chinese and Creole.

New Britain Downtown District: *CTtransit* participated in two New Britain Wellness Wednesday events at a downtown park. The City of New Britain has a high percentage of minority and/or low-income residents.

Northwest Village School: Northwest Village School, in Plainville, CT is a special education therapeutic day school that offers a state-of-the-art learning environment and student learning resources that encourages growth and discovery. In January 2018, *CTtransit* participated in an informational and Q&A session on transportation options for high school age students.

Norwalk Community Technical College: The students who attend this college are a mixed population coming from various areas such as Norwalk, Stamford, Bridgeport & Waterbury. The population is a mix of low to middle-income individuals who rely on transit and discounted transit fares. In January 2018, *CTtransit* participated in new student orientation.

Norwalk Housing Authority: The Norwalk Housing Authority (NHA) helps families by finding residence near their work, by providing quality affordable housing and transportation resources. In May 2017, *CTrides* presented to NHA staff including case workers. *CTrides* provided NHA with bi-lingual materials in Creole and Spanish for insert mailers bilingual content for NHA's newsletter.

Porter and Chester – Stratford: During the reporting period *CTrides* held outreach events with Porter and Chester. This technical school is in the greater Bridgeport area and has a high population of Hispanic and African American students studying to work in trade industries. Outreach was targeted to students who are sometimes transit-captive, or may not have their own transportation, to encourage transit and carpool use.

Randstad: Randstad is an employment placement service with many offices in Farmington, Plainville and Hartford. Randstad has a significant number of minority, low-income, and or LEP employees. *CTrides* continues to maintain a partnership with Randstad and works with Randstad to develop a program to promote public transportation and carpooling for individuals in need of transit to find and maintain employments.

Retail Grocery Inventory Services (RGIS): RGIS, specializing in retail inventory, expressed interest in promoting and increasing use of carpooling to worksites among inventory specialists via training of hiring managers and provision of literature to employees. During the reporting period, *CTrides* provided customized outreach materials. RGIS has a significant number of minority employees.

Sikorsky Aircraft Corporation (Far Mill Crossing): During the reporting period, *CTrides* partnered with Sikorsky to offer carpooling information and trial passes to employees, many of them low income and/or minority. Outreach materials were provided in multiple languages.

Southern Connecticut State University (SCSU): During the reporting period *CTtransit* discussed transportation options with students. SCSU has a high enrollment of minority and low-income students.

Southwest Community Health Center (SWCHC): *CTrides* has conducted five outreach events at Southwest Community Health Center between 2017-2019. SWCHC is a walk-in clinic, with high use by lower-income and minority populations. SWCHC sees *CTrides* as a great resource not only to their employee colleagues, but to patrons of the clinics as well. Bridgeport in general has high low-income, Hispanic and African-American populations who use these facilities. *CTrides* provides Spanish-language materials at SWCHC's request, and staff at SWCHC has been trained in navigating *CTrides.com* in Spanish.

Stone Academy (Waterbury and West Haven branches): *CTrides* has held five outreach events at Stone Academy between 2017-2019. Stone Academy sees a large population of low-income, Hispanic, and African-American students training for positions in health care. Handouts for *CTrides* are provided in both English and Spanish language.

St. Vincent's College: St. Vincent's College is a subsidiary of St. Vincent's Hospital with 100 staff and faculty and 570 students. It allows existing employees at the hospital to further their education. During the reporting period, *CTrides* extended its outreach to faculty and staff who are interested in transportation alternatives and provided outreach materials in multiple languages. Bus routes are important especially as it relates to some of the College off campus clinical sites, and therefore the trial bus pass program will be promoted.

Tunxis Community College (TCC): In May 2018, *CTtransit* participated in Tunxis Community College's Spring Fling event. Tunxis has a large number of minority and/or low-income students.

Transport for Equity Forum: In June 2019, *CTtransit* participated in the Transport for Equity Forum at the Hartford Public Library. The forum was organized to promote transit equity among Hartford's most vulnerable populations.

United Bank: In April 2018, *CTtransit* participated at the new hire orientation for United Bank in downtown Hartford. The branch serves low-income, Hispanic, and African American populations, including members and employees of the branch. *CTrides* also conducts outreach to United Bank, and during the reporting period provided trial rail passes.

University of Connecticut (Storrs): During the reporting period *CTtransit* held outreach events with UCONN. UCONN employs many low income and/or minority individuals from the Windham area.

Vernon Public Schools (VPS): *CTrides* connected with the Vernon public school system through adult based learning presentations. *CTrides* conducted UPASS and transit training for transitional programs quarterly. *CTrides'* outreach with VPS, extends to low-income, minority, and limited English proficient populations; and individuals with disabilities.

Walgreens Distribution Center: The workforce at Walgreens Distribution has grown from 450 to 800, with 43% of the workforce with varying disabilities. Walgreens Distribution also has a high number of low-income employees from the Hartford area. *CTtransit* has held events informing employees of their transportation options.

Washington Inventory Services (WIS): WIS are inventory services specialists currently providing transportation from train station to work sites in Bridgeport, CT. During the reporting period, *CTrides* developed customized overview material for new hire packets and for distribution to current employees in multiple languages.

Windham Regional Community Council (WRCC): Through a partnership with WRCC, *CTrides* frequently conducts presentations with Americorps and Foodcorps members from the community. The Windham community has a large low-income population and *CTrides*.

Windsor Health and Rehab Center: During the reporting period, *CTrides* developed a partnership with Windsor Health and Rehab Center, a nursing home located close to a bus stop where many employees utilize bus services. *CTrides* and *CTtransit* participated in outreach events providing employees with information on transportation options. *CTrides* provided several outreach materials in multiple languages.

The Workplace: The Workplace provides job training workshops to a low-income populations. The training includes resume writing, interviewing tips and preparation, employment placing and transportation resources. *CTrides* began partnering with The Workplace in 2016 and during the reporting period participated in three workshops to provide transit options and to educate attendees on how to access NuRide and use it for carpooling.

Four Factor Analysis

In order to ensure meaningful access to programs and activities, the CTDOT conducted a four-factor analysis to identify and determine the specific language services needed to communicate effectively with the LEP populations within our service areas.

The Four Factors include:

1. The number or proportion of LEP persons eligible to be served or likely to be encountered by a program, activity, or service of the recipient or grantee.
2. The frequency with which LEP individuals come in contact with the program.
3. The nature and importance of the program, activity, or service provided by the recipient to people's lives.
4. The resources available to the recipient and costs.

Factor 1: Number and Proportion of LEP Persons Eligible to be Served or Likely to be Encountered in the Service Area

The primary tool used for this analysis was the data from the 2013-2017 American Community Survey (ACS). The demographic analyses of the statewide, bus and rail service areas indicate that 8.21% of the total population in Connecticut identified as speaking English “less than very well”. CTDOT identified the occurrence of LEP populations statewide meeting “Safe Harbor” thresholds (5% or 1,000 individuals, whichever is less). Safe Harbor determinations were determined on a statewide basis and by reviewing the bus and rail service areas that service Connecticut. The service area information allows CTDOT to do targeted outreach to LEP populations that reside in areas that may be affected by major service changes.

Service Areas are defined as the following:

New Haven Rail Line (Metro North): The “New Haven Rail Line Service Area” map includes the New Haven Main line, and the New Canaan, Danbury, and Waterbury Branch Lines.

Metro North Rail operates all lines seven days a week. The lines on the map extend from New Haven Union Station to the Connecticut/New York border near Greenwich, as well as the station stops for the branch lines that extend to New Canaan, Danbury, and Waterbury.

Shore Line East Rail: The “Shore Line East Rail Line Service” area map includes the Shore Line East commuter rail service between New London and New Haven.

Amtrak operates Shore Line East for CTDOT seven days a week. The map shows the Shore Line East line which runs from New Haven to New London, and includes the defined service areas based on a 2.5 mile radius buffer around the rail stations of New Haven – Union, New Haven – State Street, Branford, Guilford, Madison, Clinton, Westbrook, Old Saybrook, and New London.

CTtransit Hartford Division: The Hartford Division operates 48 local bus routes. Routes operate 7 days a week, serving 28 towns in the Greater Hartford and New Britain Regions. The Hartford Division makes connections with Middletown Area Transit, CTtransit Waterbury Division, and CTtransit New Britain Division. The map uses ¼ miles buffers around the routes.

CTtransit New Haven Division: The New Haven Division operates 26 local routes, connecting with bus services in Meriden, Wallingford, Milford, and the lower Naugatuck Valley areas, as well as with the New Haven Line and Shore Line East rail services. Service is provided 7 days a week. The map uses ¼ mile buffers around the routes.

CTtransit Stamford Division: The Stamford Division operates 19 local bus routes. Routes operate 7 days a week. CTtransit Stamford buses connect with other state-subsidized services in Norwalk and with the New Haven Line in several locations. The map uses ¼ mile buffers around the routes.

CTfastrak: The CTtransit Hartford Division operates 8 routes for the CTfastrak bus rapid transit system. Routes operate 7 days a week and provide connections to the CTtransit New Britain and Bristol Divisions and the CTtransit Hartford Division. The map uses ¼ mile buffer around each of the stops.

CTtransit Hartford Express: 24 express bus routes are operated in the Hartford Division. All routes operate Monday through Friday, with the exception of the Waterbury Express which operates 7 days a week and provides a connection to the CTtransit Waterbury Division. The map uses 2 ½ mile buffers around each of the stops.

CTtransit Stamford Express: The CTtransit Stamford Division operates one express bus route between downtown Stamford and White Plains, New York. The route operates Monday through Friday and provides connections to the Harlem Line on Metro-North Railroad, and with Bee-Line buses in Westchester County New York. The map uses 2 ½ mile buffers around each of the stops.

CTtransit Waterbury Division: The Waterbury Division operates 30 local bus routes in Waterbury, Watertown, Middlebury, Wolcott, Prospect and Naugatuck with connections to the Waterbury Branch of the New Haven Line. Fixed route bus service is provided 7 days a week. The map uses ¼ mile buffers around the routes.

CTtransit New Britain Division and Bristol Division: The New Britain and Bristol Divisions operate 12 local bus routes in Berlin, New Britain, Cromwell, Newington, Plainville, Bristol and Meriden. Fixed route service operates 7 days a week. Connections are available to CTfastrak, the CTtransit Meriden Division, and the CTtransit Hartford Division. The map uses ¼ mile buffers around the routes.

CTtransit Meriden Division: The Meriden Division has 5 local bus routes. Service in Meriden operates Monday through Saturday. Connections are available to the CTtransit New Haven Division. The map uses ¼ mile buffers around the routes.

CTtransit Wallingford Division: The Wallingford Division has 2 local bus routes. Service in Wallingford operates Monday through Friday. Connections are available to the CTtransit New Haven Division. The map uses ¼ mile buffers around the routes.

Estuary Transit District d.b.a. 9 Town Transit: The Estuary Transit District serves Chester, Clinton, Deep River, Durham, Essex, East Haddam, Haddam, Killingworth, Lyme, Old Lyme, Old Saybrook and Westbrook. The district provides demand response and flexible fixed route services throughout the region with its 9 Town Transit bus services. Connections are available to South East Area Transit, CTtransit Hartford Division, and Middletown Transit District. The map uses ¾ mile buffers around the routes.

Northeastern Connecticut Transit District: Northeastern Connecticut Transit District provides service in Brooklyn, Canterbury, Killingly, Putnam, Thompson, Eastford, Plainfield, Pomfret, Woodstock, and Union. Deviated fixed route service operates 7 days a week with various scheduled stops located throughout the service area. Bus service operates Monday through Friday, between approximately 7AM and 5PM and Saturday 7AM to 1PM. The map uses a ¾ mile buffer around flexible routes.

Northeastern Connecticut Transit District Dial-a-Ride: Northeastern Connecticut Transit District provides service in Brooklyn, Canterbury, Killingly, Putnam, Thompson, Eastford, Plainfield, Pomfret, Woodstock, and Union. The dial-a-ride service for seniors and people with disabilities is available 7 days a week by reservation with NECTD in Brooklyn, Killingly, Putnam, and Thompson. The map represents the towns included in the service area.

Northwestern Connecticut Transit District: Northwestern Connecticut Transit District provides flexible route service in Torrington Monday through Saturday and in Winsted and Litchfield Monday through Friday. The map represents a $\frac{3}{4}$ mile buffer around flexible routes.

Northwestern Connecticut Transit District Dial-a-Ride: Public dial-a-ride service is available in Barkhamsted, Canaan, Falls Village, Litchfield (for seniors and people with disabilities only), Sharon, Salisbury, Colebrook, Cornwall, Goshen, Harwinton, Kent, Warren, Morris, New Hartford, Norfolk, Torrington, Winchester, and Winsted. Days of service vary by town. The map represents the towns included in the service area.

Windham Region Transit District (WRTD): Windham Region Transit District operates 4 fixed routes and one flexible route. Service on some routes operates 7 days a week. The map represents a $\frac{3}{4}$ mile buffer around flexible routes and a $\frac{1}{4}$ mile buffer around fixed routes.

Windham Region Transit District Dial-a-Ride: Demand-response service is available Monday through Friday in Ashford, Chaplin, Columbia, Coventry, Hampton, Lebanon, Mansfield, Scotland, Willington, and Windham. The map represents the towns included in the service area.

CTDOT has developed updated service area LEP maps, using 2013-2017 ACS data to identify the LEP populations within each of the state's service areas. Use of that mapping will assist with outreach and identifying the language assistance services needed to communicate with LEP residents within the service area. The Department continues to work developing web-based maps that can provide up to date information on the language needs of a specific census tract or group of census tracts.

Based on each service area, CTDOT calculated the number and percentage of LEP populations by language. If the number of LEP persons exceeded 5% of the total population, it would be considered an LEP language. If the LEP population was 5% or 1,000 individuals, whichever was less, it would be considered a Safe Harbor language. Based on these calculations, it was determined that Spanish was the only language that exceeded 5% in any individual bus or rail service area. Spanish exceeded the 5% LEP threshold in the following seven (7) service areas: New Haven Rail Line (MNR), Hartford Local Bus Service Area, New Britain-Bristol Bus Service Area, CTfastrak Bus Service Area, Stamford Local Bus Service Area, Stamford Express Bus Service Area, and Meriden Bus Service Area.

The following LEP and Safe Harbor Languages and the number of speakers for each language in each service area are as follows:

New Haven Line Total Population: 608,321		
Language	Count	Percentage
Spanish	43,904	7.22%
French Haitian or Creole	3,369	0.55%
Russian, Polish or other Slavic	4,695	0.77%
Other Indo European	14,646	2.41%
Chinese, Mandarin, or Cantonese	2,502	0.41%
Other Asian and Pacific Islander	2,226	0.37%

Shore Line East Total Population: 183,615		
Language	Count	Percentage
Spanish	4,323	2.35%
Other Indo European	1,436	0.78%

Hartford Local Bus Service Total Population: 659,356		
Language	Count	Percentage
Spanish	35,811	5.43%
French Haitian or Creole	1,492	0.23%
Russian, Polish or other Slavic	8,083	1.23%
Other Indo European	9,933	1.51%
Chinese, Mandarin, or Cantonese	2,778	0.42%
Vietnamese	1,557	0.24%
Other Asian and Pacific Islander	2,734	0.41%
Other and unspecified	1,539	0.23%

Hartford Express Bus Service Total Population: 1,457,311		
Language	Count	Percentage
Spanish	61,973	4.25%
French Haitian or Creole	2,955	0.20%
Russian, Polish or other Slavic	13,357	0.92%
Other Indo European	18,408	1.26%
Korean	1,418	0.10%
Chinese, Mandarin, or Cantonese	5,367	0.37%
Vietnamese	2,343	0.16%
Other Asian and Pacific Islander	4,526	0.31%
Arabic	1,377	0.09%
Other and unspecified	2,088	0.14%

New Britain Bus Service Total Population: 183,809		
Language	Count	Percentage
Spanish	10,171	5.53%
Russian, Polish or other Slavic	6,713	3.65%
Other Indo European	2,461	1.34%

CTfastrak Bus Service Total Population: 286,217		
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Language	Count	Percentage
Spanish	20,074	7.01%
Russian, Polish or other Slavic	4,877	1.70%
Other Indo European	4,119	1.44%
Chinese, Mandarin, or Cantonese	1,284	0.45%
Other Asian and Pacific Islander	1,059	0.37%

New Haven Bus Service Total Population: 579,633		
Language	Count	Percentage
Spanish	27,459	4.74%
French Haitian or Creole	1,238	0.21%
Russian, Polish or other Slavic	2,814	0.49%
Other Indo European	5,250	0.91%
Chinese, Mandarin, or Cantonese	2,730	0.47%
Other Asian and Pacific Islander	1,858	0.32%
Arabic	1,507	0.26%

Stamford Local Bus Service Total Population: 233,969		
Language	Count	Percentage
Spanish	23,558	10.07%
French Haitian or Creole	2,714	1.16%
Russian, Polish or other Slavic	2,366	1.01%
Other Indo European	3,992	1.71%
Chinese, Mandarin, or Cantonese	1,515	0.65%
Other Asian and Pacific Islander	1,363	0.58%

Stamford Express Bus Service Total Population: 166,682		
Language	Count	Percentage
Spanish	16,121	9.67%
French Haitian or Creole	2,424	1.45%
Russian, Polish or other Slavic	2,405	1.44%
Other Indo European	2,893	1.74%
Chinese, Mandarin, or Cantonese	1,367	0.82%

Waterbury Bus Service Total Population: 266,766		
Language	Count	Percentage
Spanish	12,068	4.52%
Other Indo European	5,866	2.20%

Windham Bus Service Total Population: 154,171		
Language	Count	Percentage
Spanish	5,577	3.62%
Chinese, Mandarin, or Cantonese	1,684	1.09%

Windham Dial-A-Ride Total Population: 88,423		
Language	Count	Percentage
Spanish	4,218	4.77%

Meriden Bus Service Total Population: 76,602		
Language	Count	Percentage
Spanish	4,435	5.79%

Estuary Bus Service Total Population: 202,822		
Language	Count	Percentage
Spanish	4,904	2.42%
Other Indo European	1,639	0.81%

Northwest Rural Transit District Total Population: 64,684		
Language	Count	Percentage
Spanish	1,473	2.28%

Northwest Dial-a-Ride Total Population: 91,085		
Language	Count	Percentage
Spanish	1,679	1.84%

LEP and Safe Harbor Languages Statewide

While no languages reached the 5% LEP threshold statewide, all language groups under the 2013-2017

ACS data set reached the safe harbor threshold. The following LEP languages and the number of speakers for each language state-wide are as follows:

Total Population: 3,408,290		
Language	Count	Percentage
Spanish of Spanish/Creole:	156,164	4.58%
French Haitian or Creole	11,312	0.33%
German or other West Germanic	1,469	0.04%
Russian, Polish or other Slavic	21,828	0.64%
Other Indo European	45,452	1.33%
Korean	3,193	0.09%
Chinese, Mandarin, or Cantonese	14,215	0.42%
Vietnamese	4,000	0.12%
Tagalog Filipino	2,404	0.07%
Other Asian Pacific Islander	10,811	0.32%
Arabic	4,439	0.13%
Other and unspecified	4,501	0.13%
Total LEP:	279,788	8.21%

Factor 2: Frequency of Contact by LEP Persons with Transit Services

CTDOT examines the frequency with which LEP individuals come into contact with its services by conducting surveys and reviewing the use of language assistance tools.

Customer and Front-line Employee Surveys

I-84 Hartford Viaduct Onboard and Stop Survey

As part of the “Let’s Go CT!” plan, Connecticut’s 30 year transportation initiative, and the upcoming I-84 Viaduct Reconstruction Project; CTDOT conducted an onboard and at-stop survey to solicit input from Hartford area transit riders to determine who rides the bus and how riders use local transit. By learning about rider demographics and usage, CTDOT can project how bus service may be affected by various I-84 alternatives.

Over the course of two months, approximately 49,000 Hartford area transit riders were surveyed, and of these riders, 29% indicated they spoke another language in addition to English. Of the 29%, 2% spoke English less than very well. The chart below indicates the primary languages spoken by Hartford riders.

Primary Language

Language	Percent of Total
Arabic	0.34%
Chinese	0.57%
French	0.41%
Haitian Creole	0.32%
French	

Hindi	1.39%
Italian	0.29%
Jamaican	0.82%
Polish	0.41%
Spanish	21.72%
Other	2.88%
English Only	70.86%

CTtransit Customer Satisfaction Survey – New Haven Division

CTtransit, at the direction of the Connecticut Department of Transportation (CTDOT), conducted a Customer Satisfaction Survey for the New Haven Division. One of the goals of the survey was to collect rider demographic data, including but not limited to English proficiency, and primary language spoken at home. Out of all respondents, 20% of respondents indicated they speak English less than very well. Additionally, 87% of respondents indicated they speak English at home followed by 11% indicating they speak Spanish at home. The next highest reported languages spoken at home were French and Hindi.

Metro-North Railroad Customer Satisfaction Survey

In 2019, Metro-North Railroad conducted a survey with over 2,593 respondents, where 2,167 answered language-related questions. Their responses are summarized below:

- Which language would be most helpful for you to receive Metro-North written or electronically displayed information in?
 - 98.8% stated English or no preference
 - 1.2% stated Spanish or another language
- Which language would be most helpful for you to understand Metro-North announcements or to converse in with Metro-North personnel (i.e. to ask for travel directions)?
 - 98.9% stated English or no preference
 - 1.1% stated Spanish or another language
- What is the primary language spoken in your home?
 - 92.8% English
 - 2.8% Spanish
 - 4.4% another language
- How well do you speak English?
 - 95.5% very well
 - 3.7% well
 - 0.6% not well
 - 0.1% not at all

Shore Line East Customer Satisfaction Survey

In 2019, CT*rides* conducted a survey on Shore Line East with over 641 Connecticut respondents, where 598 answered language-related questions. The survey asked respondents their primary language spoken in your home and received the following response:

- 95.7% English
- 1.3% Spanish
- 3.0% another language

CTDOT Employee LEP Interaction Survey

In an effort to ensure that we are providing adequate language assistance to the LEP riders, CTDOT conducted a survey of front-line employees to monitor the number of LEP customer contacts for all languages. A summary of responses by staff from the Bureau of Public Transportation is provided below:

- 88% of Bureau of Public Transportation staff interact with the general public occasionally or often.
- 67% of Bureau of Public Transportation staff interact with individuals with Limited English proficiency occasionally or often.
- Bureau of Public Transportation staff comes into contact with LEP populations from the following language group in order of frequency (highest to lowest):
 - Spanish
 - Polish
 - Italian and Chinese (tied)
 - Portuguese and Arabic (tied)
 - French
 - Korean
 - Hindi
 - Russian and Vietnamese (tied)

CTtransit Front-line Staff Survey

As a tool to gauge CT*transit* front-line employee interactions with LEP populations, in 2019 CT*transit* administered an LEP interaction survey. It was the first LEP survey since 2011, and included operators, supervisors, customer service personnel, and fare inspectors. The frequency of interaction with twenty-six (26) languages are detailed in the table below.

Frequency	Never	Rarely	Sometimes	Very often
Spanish or Spanish Creole	1	9	25	138
French Creole	70	45	29	27
Laotian	123	24	8	10
Polish	56	65	40	9
Portuguese	65	62	35	7
Albanian	58	65	36	5
Chinese	66	75	26	4
Italian	77	62	28	3

Unknown	86	21	14	3
Vietnamese	103	50	12	3
India	0	0	0	2
Russian	91	52	24	1
Hindi	0	0	0	1
Punjabi	0	0	0	1
Guajarati	0	0	0	1
Indi	0	0	0	1
Serbo-Croatian	124	32	8	0
Arabic	0	2	3	0
Sign Language	0	2	3	0
African	0	3	1	0
Japanese	1	0	1	0
Ukrainian	0	0	1	0
French	0	0	1	0
Egyptian	0	1	0	0
Punjabi	1	0	0	0
Iraqi	1	0	0	0

Website Data Translations

The second tool used to gauge the level of interaction in order to improve the customer experience for LEP individuals was to analyze the use of website alternative language use.

CTtransit provides a custom-translated Spanish version of its website. CTtransit also offers Google Translate on its main website. MNR and SLE websites offer machine translations into Spanish and a number of other languages using Google Translate. Google Translate is not as effective as custom translations, but it is one tool that can be used to measure the level of interaction by LEP individuals. Google Translate offers machine translations so it is generally not desired to rely upon Google Translate for translation of vital documents or detailed information that would require more detailed translations.

For the two websites under the control of CTDOT, the analysis found:

www.Cttransit.com

- There were a total of 15,593,843 views to the cttransit.com website during the reporting period; and 320,590 or 2% of the of the page views were to the Spanish translated homepage.
- For the reporting period, just over 2.5% of site visitors had their browser language set to one of five variations of Spanish. This accounted for approximately 73,400 users. The CTtransit website consistently receives about 96% of visits from browsers set to English as the language. 1.5% of total site visits to browsers not set to English or Spanish variants were to other languages.

www.shorelineeast.com

The primary used language based on Google Analytics was English at 98.7%. The next most used languages were Spanish at 0.4%, Chinese at 0.192%, French at 0.2%, and German at 0.113%. All other languages fell at a level of 0.1% or below.

In summary, less than four percent (4%) of all visits to the *CTtransit* or SLE websites involve the use of language assistance services. This statistic is only one measure, and not a very reliable measure, of the demand from customers or potential customers. Intuitively it is expected that a substantial portion of the LEP encounters with state-owned transit services will occur on the bus or train. Accordingly, it is reasonable that resources for language assistance be focused heavily on on-board activities.

Factor 3: Nature and Importance of Transit

Public transit is a key means of achieving mobility for many LEP persons on both a daily basis and in the event of emergency or urgent situations. Providing translation or interpretation services to ensure access to LEP persons helps to increase and retain ridership among *CTtransit*'s LEP communities. CTDOT has determined its most critical services are fares and tickets; routes and schedules; and safety and security. Barriers in these areas could: (1) limit a person's ability to gain full benefit from services, or (2) pose safety and security issues and could place a person in physical danger.

The table below, generated from 2013-2018 American Community Survey Table S0802 data, demonstrates why transit is important to LEP populations. Though the LEP community comprises a little over 8% of the overall population in Connecticut, the LEP community comprises close to 12% of public transit users, indicating great importance in ensuring that they have the ability to access and use the system.

Public Transit Users for Workers 16 years old and over	84,347
Speak a Language other than English	30.08%
Speak English Very Well	18.9%
Speak English Less than Very Well	11.9%

The table below provides similar data generated from the American Community Survey One-Year estimates, for each year within the reporting period of this plan.

Reporting Year	Total Workers who take Public Transit	Speak a Language other than English	Speak English Very Well	Speak English less than Very Well
2018	79,664	27%	17%	10%
2017	83,460	28.4%	19.7%	8.7%
2016	88,162	33.6%	19.8%	13.8%

Additionally, in certain situations, the delivery of clear instructions regardless of language is required. For example, emergency evacuation instructions in stations and vehicles should be either non-written/non-verbal or provided in languages that meet the thresholds for LEP or safe harbor. CTDOT

continues to implement a program that uses pictograms whenever possible to illustrate emergency procedures, travel directions, etc. on CT*transit* buses.

Factor 4: Available Resources and Costs of Providing Language Assistance Services

This last step of the Four Factor Analysis allows CTDOT to weigh the demand for language assistance against current and projected financial and personnel resources.

As described in Factors one and two, CTDOT employs a number of strategies to identify LEP populations and interactions with LEP riders. These strategies include gathering data from the American Community Survey, GIS mapping, monitoring website use, administering surveys, and maintaining partnerships with community and faith-based organizations. CTDOT intends to continue administering surveys to riders and front-line staff to keep a pulse on increased or decreased interactions with LEP populations. If revisions to vital documents occur, CTDOT will translate the document into Spanish and provide a description of the document with contact information to receive language assistance in safe harbor languages.

CTDOT continues to contract with Voiance, an over the phone interpretation provider that provides for translation services into almost any language. The Office of Contract Compliance maintains a line item in its overhead budget to cover the cost of department wide usage.

Under CT*transit* the three major costs associated with translating materials include:

- The SAAS module (Lingotek) that is built into the website and facilitates the automated sending and posting of content.
- Charges incurred by Lingotek for the actual word count on the content translated, billed through the web contractor, Cloudsmart.
- CT*transit* also utilizes Language Link, a local vendor for non-web translations or anything that requires translation into a language other than Spanish. Spanish translations are performed by in-house CT*transit* staff.

Provided below are the costs for each vendor during the reporting period.

- Cloudsmart Translation Charges – Average \$683.35/month for a three-year total of \$24,600.00.
- Lingotek Charges - \$23,000/year for a three-year total of \$69,000.00.
- Language Link Translation \$4,739.29.

CTDOT will continue to expend a reasonable portion of the budgetary dollars to meet compliance goals and fulfill the provisions of the language assistance plan. CTDOT recognizes that in order to continue to expand the program, new sources of internal and/or external funding may be needed, depending upon the cost and scope of new strategies and actions.

Language Assistance Plan (LAP)

As a direct recipient of Federal Transit Authority (FTA) funds, the Connecticut Department of Transportation (CTDOT) is required to develop a Language Assistance Plan (LAP) that ensures meaningful access and addresses the needs of Limited English Proficient (LEP) populations. The CTDOT LAP includes the following elements:

- Current language assistance measures;
- Language initiatives planned for the next three years;
- Limited English proficiency training;
- Providing notice of the availability of language assistance to LEP individuals; and
- Procedures for monitoring and updating the Plan.

Successful Language Assistance Measures to Continue

Partnerships: CTDOT continues to develop partnerships with community and faith-based organizations that serve LEP populations and can assist with targeted outreach, translation of notices and postings on multi-lingual websites, social media, or in multi-lingual publications.

Oral Translation: CTDOT contracts for translation and interpretation services using a Department of Administrative Services (DAS) master contract which includes vendors that provide services in locations all around the State. This contract has a list of preapproved firms that can provide translation and interpretation services by geographic location.

Through the DAS master contract, CTDOT continues to contract with Voiance to provide over the phone interpretation services. Voiance allows for someone who is not fluent in English to call into CTDOT with questions or requests for services or general information. CTDOT is then able to call into Voiance, where an interpreter translates both ends of the call and provides the individual with the needed assistance. This service can also be utilized for in-person contacts with LEP persons by utilizing the speaker function on the phone. CTDOT has developed an internal reporting system for the use of Voiance that asks both the language translated and the purpose of the phone call. Tracking the usage of the translation system will help to clarify the needs of LEP communities. CTDOT also uses available and authorized staff to translate upon immediate need.

CTDOT has assigned Voiance access codes to seventy-five (75) CTDOT employees. Access code holders are required to attend a Voiance training session prior to receiving their access code. See Voiance Access Procedures and Guidelines, Connecticut Department of Transportation Employee User Guide on pages 174-182 of the CTDOT FTA Title VI Program Appendix.

CT*transit* provides language assistance through a telephone Customer Service Center. LEP customers who call the Telephone Center have direct access to bilingual customer service representatives and can be connected to an over-the-phone interpretation service with linguists who speak other languages. The Department is charged a per minute rate for services provided. Similarly, Metro-North and CT*rail* customers have multi-language translation available through outside language line telephone service providers.

Document Translation: CTDOT continues to identify documents that are vital for our services and chooses formats that most effectively communicate the messages contained in those documents. The Department uses the DAS master contract for written translation and interpretation services.

Vital documents include:

- Service change notices – as they occur;
- Fare change notices – as they occur;
- Title VI notice to beneficiaries;

- Title VI complaint form and procedure;
- Notices of public meetings and hearings; and
- Applications or instructions on how to participate in a recipient's program or activity or to receive recipient benefits or services (e.g., ADA Paratransit applications)

The following documents are defined as vital documents by Metro-North (MNR):

- Statement of rights under Title VI;
- Title VI complaint procedure and complaint form;
- Notice of public hearings; and
- Notice of service schedule changes and fare changes.

CTDOT has translated its Title VI Notice to Beneficiaries and Title VI Complaint Form in their entirety, into Spanish, and has translated tag lines summarizing the documents and providing contact information for language assistance, into eleven languages, including all statewide safe harbor languages identified in Factor One of the Four Factor Analysis. CTDOT continues to determine which documents are necessary to translate; the appropriate format to most effectively communicate the message; and the efforts necessary to provide timely relevant information about CTDOT programs and services to LEP communities. When translating documents CTDOT will also consider the literacy needs of the LEP populations to insure effective communication.

Written informational notices on buses are posted in English and Spanish and include contact information for language assistance in alternative languages. Materials critical for accessing *CTtransit* and *CTrail* services have been translated into Spanish. Non-vital documents will be translated into alternative languages upon request.

Electronic Media Translations: Metro-North Railroad (MNR) and *CTrail* websites offer machine translations into Spanish and a number of other languages using Google Translate. MNR utilizes print and electronic media sources and language translations to communicate with the public and riders, including offering multiple language formats on ticket vending machines.

CTtransit provides a custom-translated Spanish version of its website; and though less desirable than the custom translations, Google Translate is available on *CTtransit*'s main website and all websites of CTDOT's rural transit districts.

Outreach Materials: CTDOT provides notice of the right to free language assistance at no cost to the public on outreach documents, including project fact sheets, meeting notifications and other materials in the primary language of those with limited English proficiency.

Through the utilization of Service Area Maps (and further dividing these according to individual census tracts), CTDOT is able to specifically target the areas affected by service/fare changes or other changes to transit operations that could affect these communities. This analysis ensures that the outreach is directed to the specific LEP communities affected. The decisions regarding which documents to be translated may be impacted by feedback from the LEP community. This improved outreach is supplemented by the use of printed documents to be placed in locations where customers or potential customers go for transit information, services, or questions.

Whenever CTDOT holds a public hearing/meeting (whether during Environmental Assessment, Design, or service planning/monitoring), the legal notice regarding the hearing/meeting will indicate that LEP persons requiring language assistance may make requests to CTDOT within the time period provided. CTDOT staff in need of translation services may consult the Department of Administrative Services list of contracted service providers for translation and interpreting services.

CTDOT will continue to conduct culturally-competent outreach to LEP communities to increase awareness and the use of CTDOT services and programs. CTDOT regularly communicates with Community Based Organizations (CBOs) and Faith Based Organizations (FBOs) that serve LEP communities to gain a better understanding of the needs of LEP populations, and to develop strategies to ensure LEP communities are well informed and well-served.

MNR and *CTrail* news releases are distributed to media outlets that include Spanish print. MNR advertises in *LaVoz*, a Spanish language newspaper. CTDOT and *CTtransit* work directly with media outlets serving minority and LEP populations to provide service information to their readers, listeners, and viewers. *CTtransit* also places Spanish language signage on vehicles for basic fare information and rights under Title VI as well as to announce service changes and other situations important to customer safety. CTDOT continues to undertake the efforts necessary to address other languages identified under Safe-Harbor.

Training: CTDOT and *CTtransit* will continue to provide training to front-line and other staff on how to effectively engage and respond to LEP customers.

Customer Surveys: CTDOT will continue to collect demographic information and travel patterns through the use of customer surveys. Upon completion of the surveys, CTDOT analyzes the results to determine any changes related to the locations and concentrations of LEP populations, and to assist in evaluating the effectiveness of current outreach to LEP individuals. The Office of Contract Compliance will continue to monitor surveys to ensure that demographic questions are included.

Identifying Language Barriers: CTDOT is continuously enhancing its outreach to CBOs and other groups. This effort assists in assessing current gaps in the dissemination of transit information to current users due to language barriers. It also helps to identify new potential customers who may not be accessing the system, due to language barriers.

The types of approaches to determine language barriers include, but are not limited to:

- CTDOT will continue to keep up to date contact information for CBOs in the various service areas and administer surveys and initiate conversations to determine any language gaps. CTDOT regularly updates its Resource for Community Outreach and Referrals Directory, and has developed a plan to monitor the Directory to ensure contact information is accurate, and that newly formed or identified organizations are included;
- CTDOT will continue to collect attendee feedback from public hearings and meetings regarding language usage with voluntary demographic surveys;
- CTDOT will continue to monitor usage of it's over the phone interpretation service for requested languages; and
- CTDOT will continue to conduct staff surveys to identify frequently encountered language groups.

Enhanced Data Collection Tools: During the reporting period CTDOT enhanced its data collection tools, including data collection related to experiences and encounters with LEP persons. CTDOT will continue to employ the following data collection strategies:

- CTDOT will continue to work with *CTtransit* and *CTrail* to gain information from front line employees and collect data from drivers, telephone call center employees, ticket agents, and security personnel regarding interactions with LEP populations, languages spoken, and the nature of information request.
- CTDOT will continue to collect information from Community Based Organizations (CBO) and Faith Based Organizations (FBO) relative to language gaps and information needs for LEP persons they serve for the purpose of having more direct outreach to LEP populations. The Office of Contract Compliance has compiled a database of CBOs and FBOs and will utilize the CBOs to help with outreach to the LEP populations. Outreach will be on-going to these organizations. The CTDOT has completed a major update of the Directory, and has developed a process to continuously monitor the accuracy of the contact information provided within the Directory.
- In April of 2020, the OCC administered a Limited English Proficiency Survey to all CTDOT employees. The survey included questions designed to collect data related to the most common languages encountered, the employees' awareness of the language assistance measures available, and to solicit comments or suggestions on ways to enhance our language assistance program. The OCC will continue to solicit this feedback on a regular basis from Departmental employees. The results of the survey are located on pages 183-189 of the CTDOT FTA Title VI Program Appendix.

Language Initiatives for the Next Three Years

Over the next three years specific actions will be taken to implement a strong program of enhanced language assistance services. Efforts will be made to provide language assistance training to subrecipients, in an effort to ensure that language services are provided in a timely manner to those requesting services.

Public Involvement Procedures (PIP) Update: In 2020, the Department updated its Public Involvement Procedures (PIP). The OCC will work with the Bureau of Policy and Planning to develop and implement a roll-out plan for the updated PIP to ensure that all the Department's public engagement activities are compliant under Title VI, including providing meaningful access to LEP populations.

CTDOT Staff Language Assistance Training: The Office of Contract Compliance (OCC) will offer training specifically on the language assistance measures available to CTDOT staff, and guidance on how to effectively communicate with LEP populations. To encourage participation by all staff, the OCC will offer live virtual training, as well as training in the form of an E-Learning module.

Language Assistance Resource Guides: The Office of Contract Compliance (OCC) will develop and disseminate a Language Assistance Resource Guide to all CTDOT staff. The resource guide will detail the language assistance tools available to CTDOT staff including cost.

LEP Experience Reporting: The OCC will implement a program to require reporting on LEP experiences, whether communication was successful or not. Reminders will be sent to CTDOT staff on an annual basis to collect this data.

Enhanced Outreach: CTDOT will enhance its outreach to assess the current language gaps in the dissemination of vital information to current users. To identify new potential customers who may not be accessing the system due to language barriers, CTDOT will reach out to a broad base of community organizations in order to assure enhanced public involvement in the transportation and transit service planning processes. A natural by-product of this initial outreach effort will be to learn first-hand what types of special language assistance services would best meet the needs of the agencies and their LEP clients. The information provided by CBOs and FBOs will allow CTDOT to develop strategies to enhance targeted efforts to address the needs of LEP individuals.

Internal Listing of Bilingual Employees: The OCC will investigate the possibility of developing a listing of willing and available bilingual CTDOT managers who are able to offer interpretation services as needed. The listing will include the employee's name, contact information and the language(s) for which they are able to provide translation. The list will be circulated agency-wide. The list can be used to identify agency personnel who may be able to provide last-minute oral translation, or to verify the accuracy of translated documents.

Limited English Proficiency Training

The Office of Contract Compliance (OCC) offers Title VI training to subrecipients annually, or upon request. All Title VI training sessions include a component that advises subrecipients of the requirement to provide meaningful access to Limited English Proficient (LEP) populations. OCC has developed a training curriculum and a Title VI Training Booklet. The training booklet provides an overview of Title VI with a brief history of the regulations and authorities. The training booklet also covers Limited English Proficiency (LEP) requirements, the Four Factor Analysis, and Safe Harbor requirements. A copy of the Training Booklet can be found on pages 190-224 of the CTDOT FTA Title VI Program Appendix.

In response to feedback received from subrecipients in November 2019, the OCC transitioned its training from in-person to an online format in the form of E-Learning Modules. With limited staff and resources, and high employee turnover at subrecipient organizations, the need for online training was frequently expressed. Since the launch of the FTA Title VI Training for Subrecipients E-learning module in November 2019, thirty subrecipients have accessed the module with multiple subrecipients referring to the module on more than one occasion. It is important to note that this does not preclude the OCC from offering additional in person training sessions in the future or upon request from subrecipients who prefer in person sessions to online training.

During the reporting period, the OCC conducted training sessions and participated in outreach events covering Title VI and LEP requirements.

Date	Training/Outreach Event	Target Audience
August 15, 2017	Title VI/LEP Training	CTDOT Subrecipients
August 28, 2017	Title VI/LEP Training	CTDOT Subrecipients

October 16, 2017	Transportation Expo – session on Title VI and LEP requirements	Transit Providers
November 19, 2018	Multi-modal Transportation Summit – Civil Engagement Panel (including engagement with/outreach to LEP populations)	Transportation professionals; General Public
November 2018	Launched CTDOT Internal Employee Title VI E-Learning Module	CTDOT Staff
November 27, 2018 (AM and PM Sessions)	Title VI/LEP Training	CTDOT Subrecipients
June 7, 2019	Bureau of Public Transportation Summit – Customer Sensitivity Training, including LEP and ADA	CTDOT Bureau of Public Transportation Employees
November 2019	Launched FTA Title VI Training for Subrecipients E-Learning Module	CTDOT Subrecipients

Additionally, CTtransit conducted thirty-one training sessions for operators and customer service representatives during the reporting period, and each session included an LEP component.

CTtransit will continue to train their front-line employees (including drivers, customer service representatives, operation supervisors, and other employees who have direct access to the public), on how to provide service to LEP customers (whether in person, by phone, or written communication). Training will also provide instruction on how to use phone translation service, and how to monitor encounters with LEP individuals. Individuals attending the training are also provided with a copy of the Title VI policy in the employee handbook.

Metro-North customer call center staff are trained in procedures to help LEP individuals access the language line services if language assistance is needed. Metro-North reviews the services and identifies the most effective strategies for equipping key front line employees to connect customers to those services. Those strategies may include reference materials, informational meetings and/or formal training, as appropriate.

CTDOT recognizes the importance of training not only subrecipients on their LEP requirements, but also CTDOT staff, particularly those who have contact with the general public. In addition to LEP training offered to subrecipients, in November 2018 OCC launched a Title VI E-Learning Module specifically for CTDOT employees. The module outlines the Department's LEP requirements and the language assistance measures available, including in person, over the phone, and document translation.

Providing Notice to LEP Persons

CTDOT has translated its Title VI Notice to Beneficiaries and Title VI Complaint Form into Spanish. Additionally, the Department has translated a description of the documents, along with contact information for language assistance into eleven alternative languages, including all languages that reach the safe harbor threshold statewide.

CTDOT has added "For additional information, or free language assistance, please call (XXX) XXX-XXXX" on its website in eleven alternative languages. If language assistance is needed CTDOT will access its over the phone interpretation provider to interpret the phone call and provide the LEP caller with the information they are requesting.

CTDOT will continue to consult with the CBOs and FBOs regarding public meetings and hearings, service and fare changes, available language assistance to the LEP community (such as over the phone translation), and other programs, activities, and benefits available to the LEP community. CTDOT encourages their participation to ensure their needs and interests are known and addressed. When communicating with the CBOs and FBOs, CTDOT provides instructions on how to notify the Department if interpretation services are needed.

CTDOT provides notice of “right to free language assistance” and will continue to determine which documents are vital for translation and choose the appropriate format(s) to most effectively communicate the messages contained in the vital documents to provide timely and relevant information about CTDOT programs and services to LEP communities. CTDOT will assess and monitor the effectiveness of its language assistance plan on an ongoing basis.

Monitoring and Updating the Language Assistance Plan

CTDOT will monitor its Language Assistance Plan (LAP) on an ongoing basis to ensure new LEP populations are identified and their needs are addressed. The LAP will be reviewed annually, unless it is determined that more frequent evaluations are needed, and changes will be incorporated. On an annual basis CTDOT will solicit feedback from the CBOs that serve LEP populations.

CTDOT will also monitor the LEP plan to ensure that it is effective. Close attention will be paid to requests for language assistance, census data changes and updates, complaints, feedback from community based organizations, faith based organizations, feedback from customers, changing technology or new resources available to provide language assistance, and any other information that would enhance and help evaluate the effectiveness of the plan. Furthermore, CTDOT will continue to include language specific demographic questions as part of its ridership surveys in order to evaluate which LEP communities are accessing transit services, and whether there are any barriers prohibiting additional LEP riders from accessing CTDOT’s programs or benefits. Should any of these monitoring methods reveal issues with CTDOT’s current LAP plan, CTDOT will make the necessary revisions to ensure no one is denied access to programs or benefits due to language barriers or their national origin.

The Title VI Workgroup meets monthly, or more frequently as needed to discuss the goals and the implementation efforts necessary to comply with the language assistance plan. The workgroup will continue to discuss any trends or patterns requiring attention. All members of the workgroup provide research, ideas and solutions, strategies and concepts that assist in the developments of a meaningful language assistance plan.

In addition to quarterly meetings with CT*transit* and Metro North Rail, to discuss updates and/or monitoring activities related to Title VI and LEP, CTDOT has implemented a quarterly Title VI Activity Report to provide a written summary of Title VI activities, outreach events, and other related activities. This report allows CTDOT to continuously monitor transit related activities for Title VI and LEP Compliance.

Committee Membership

CTDOT does not have any transit-related, non-elected boards, advisory councils or committees, or similar committees whose members are selected by CTDOT for transit related decision-making purposes. In the event CTDOT establishes any transit related, non-elected boards, advisory councils or

committees, the Department will maintain a table showing the demographic breakdown of the membership, and a description of the efforts made to encourage minority participation.

Providing Assistance to Subrecipients

FTA C 4702.1B requires primary recipients to assist their subrecipients in complying with DOT's Title VI regulations, including the general reporting requirements. The Office of Contract Compliance (OCC) provides assistance to subrecipients through training and the development of guidance documents.

Training

The OCC offers training in three formats: E-learning modules; one-on-one training; and group training sessions. Due to the limited time and personnel resources, and frequent employee turnover of many of the Department's subrecipients, the OCC considers the electronic training modules to be the most effective training delivery method. During the reporting period the OCC developed an electronic training module specifically designed to educate FTA subrecipients on their requirements under Title VI as recipients of federal funding. Since the launch of the module in 2019, there have been sixty-four (64) visitors. The module can be accessed by visiting CTDOT's Title VI webpage, at

<https://portal.ct.gov/DOT/Business/Contract-Compliance/Title-VI-Page>

The module also provides contact information in the event the participant has questions; needs additional information on a topic within the module; or wishes to request additional training.

The topics covered in the module include:

- What is Title VI and what are your responsibilities as a subrecipient?
- What is Limited English Proficiency and your responsibilities as a subrecipient?
- How does Title VI impact what you do?
- Your Roles and Responsibilities Under Title VI
 - Notification to Beneficiaries
 - Title VI Assurances and Posters
 - What is a Title VI Complaint? How to Process a Title VI Complaint
 - Public Involvement and Participation

Additionally, the Office of Contract Compliance hosted three in-person training sessions during the reporting period. These sessions were held at CTDOT Headquarters in Newington, CT. The table below provides details of the in-person training sessions conducted during the reporting period.

Date of Training	Number of Attendees	Audience
August 15, 2017	27	5310 grantees, CTDOT staff, Council of Government staff
September 28, 2017	19	5310 grantees, CTDOT staff, Transit District staff
November 27, 2018 (AM Session)	14	5310 grantees, Transit District staff,
November 27, 2018 (PM Session)	23	5310 grantees, Transit District staff, Council of Government staff

Guidance Documents/Templates

In addition to training, the Office of Contract Compliance develops guidance documents and templates to aid subrecipients in the process of developing the Title VI documents required under FTA C 4702.1B. While conducting subrecipient reviews, several subrecipients expressed a desire for a guidance document specific to the requirements of traditional 5310 grantees. The OCC developed the requested guidance document and provides a link to the document in multiple locations throughout its website.

The guide includes the following:

- Description of all Requirements under ‘General Requirements’ Chapter III of FTA C 4702.1B;
- Frequently Asked Questions for each Requirement;
- Internet Resources;
- CTDOT Contact Information;
- Title VI Notice to the Public Template;
- Title VI Complaint Process and Procedure Template;
- Title VI Complaint Form Template; and
- Title VI Complaint Log Template.

The 5310 Guide to Title VI Compliance will be reviewed annually at a minimum; and updated as appropriate based on user feedback and program enhancements. Additionally, the OCC provides Title VI document templates on its Title VI webpage, or directly to subrecipients upon request.

Subrecipient Monitoring

To ensure subrecipients are complying with the requirements under Title VI, the Department of Transportation (CTDOT) conducts a Title VI compliance review on subrecipients at least once every three years. The Department utilizes the reviews as a tool to remind subrecipients of their obligations and responsibilities under Title VI and to monitor their Title VI program implementation. Subrecipients include traditional and nontraditional 5310 grantees, councils of governments, and transit districts.

The assessments are also used to determine subrecipient training and technical assistance needs. The OCC offers Title VI training to all subrecipients receiving federal funding, individualized training is also available upon request. During the reporting period the OCC developed an electronic training module, designed specifically for subrecipients of FTA funds. The training module can be accessed from the CTDOT Title VI webpage at <https://portal.ct.gov/DOT/Business/Contract-Compliance/Title-VI-Page>.

Traditional 5310 Subrecipients:

The Office of Contract Compliance (OCC) partners with the Bureau of Public Transportation (hereinafter referred to as ‘the Bureau’) to combine Title VI reviews with the Bureau’s traditional 5310 subrecipient audits. Together, the OCC and the Bureau conduct 30 (thirty) audits each year for traditional Section 5310 grantees. They are conducted year-round (from July-June). Approximately 10 (ten) audits are conducted on-site at the subrecipients’ location, and no more than 20 (twenty) are conducted virtually via a desk audit site visit. It is important to note that due to the current COVID-19 pandemic, most if not all reviews will be conducted virtually.

The Bureau initiates the audit and notifies the OCC once the subrecipient has successfully completed the first phase. Upon notification, the OCC initiates Phase II with a Title VI Assessment Survey and a request

for the Title VI documents listed below. A copy of the assessment survey can be found on pages 225-228 of the CTDOT FTA Title VI Program Appendix.

- Title VI Notice to the Public
- Title VI Complaint Form
- Title VI Complaint Process
- Title VI Complaint Log
- Public Participation Plan
- Four-Factor Analysis
- Limited English Proficiency Plan
- Organizational Chart identifying the Title VI Coordinator

Upon receipt of the requested documents and completed survey, the OCC reviews the submission to determine whether subrecipient has implemented the necessary processes and procedures to comply with the Title VI and Limited English Proficiency (LEP) requirements. The Office of Contract Compliance recognizes that some of its' grantees have limited staff and resources. To reduce the administrative burden of creating all documents from scratch the OCC provides each subrecipient with templates for the following documents:

- Title VI Notice to the Public
- Title VI Complaint Form
- Title VI Complaint Process and Procedures
- Title VI Complaint Log

These templates are posted on the Department's Title VI webpage. Subrecipients have the option of using the templates to aid in the development of their plan or to develop their own documents. Whether utilizing the templates or their own formats, their Title VI programs must meet the requirements of the FTA Circular 4702.1B.

After review of the submission, the OCC provides the subrecipient with a review report outlining the following:

- Accepted Documents.
- Identified Deficiencies. In addition to providing a detailed description of the deficiency, the OCC includes guidance for addressing and corrected the noted deficiency.
- Outstanding Documents.

Generally, subrecipients are provided thirty-days from the receipt date of the review report to correct any deficiencies and submit any outstanding documents.

In 2019 the OCC developed and released a 5310 Grantee Guide to Title VI Compliance. The guide was developed in response to requests from 5310 grantees for a simplified guidance document, specific to the Title VI requirements of 5310 funding recipients. A copy of the guide can be found on pages 229-241 of the CTDOT FTA Title VI Appendix.

Nontraditional 5310 Subrecipients:

Many recipients of nontraditional 5310 funding, overlap and are reviewed in other subrecipient categories (i.e. Council of Government, 5311, and traditional 5310). Over the next three years, 2020-2023, the OCC will audit all non-traditional 5310 subrecipients, that were not reviewed under another subrecipient category. The audits will be performed as desk audits, where subrecipients will be emailed an electronic assessment packet, similar to the assessment provided to the traditional 5310 subrecipients. The assessment will instruct the subrecipient to submit copies of the documents required under Title VI; this will include all documents required under General Requirements (Chapter III) of FTA Circular, FTA C 4702.1B.

5311 Subrecipients

Similar to the traditional 5310 program reviews, the OCC partners with the Bureau of Public Transportation every three years to conduct a thorough Transit System Audit, which includes a civil rights component, of all 5311 subrecipients. The last round of audits was completed in 2019. During this time, the OCC conducted a Title VI audit consisting of a site-visit and a review of all Title VI required documents. A corrective action plan for each subrecipients was prepared detailing any findings, at which point each subrecipient was provided 45 days to address any identified deficiencies. The next round of audits will be conducted in 2022. The review approach has been successful in identifying the subrecipient's compliance with Title VI and other civil rights requirements, and the OCC does not anticipate any major changes to the review process.

Metropolitan Planning Organizations & Councils of Governments:

On a triennial basis, the Department conducts Title VI process reviews on Metropolitan Planning Organizations (MPOs) and Council of Governments (COGs). The Department follows a similar process when reviewing MPOs as it does with 5311 subrecipients. The survey assessment tool and requested Title VI documents were modified slightly from the instrument issued to 5310 subrecipients to address the MPO requirements outlined in FTA Circular 4702.1B. Like with 5311 subrecipients, a site visit to each COG is scheduled to review the survey assessment and submitted Title VI documents. In 2019, the OCC completed a review of all COGs statewide. The next round of reviews is scheduled for 2022, unless there is cause to conduct a review ahead of the triennial schedule.

Listing of Subrecipients and Review Schedule

All subrecipients will be reviewed for Title VI compliance at least once every three years. Situations may occur where a subrecipient may be audited more than once in a three-year period, particularly those that are subrecipients under multiple programs. A list of subrecipients and tentative review schedule can be found on pages 242-244 of the CTDOT FTA Title VI Program Appendix. It is important to note that the schedule is subject to modification. This is especially true of 5310 traditional and nontraditional grantees as the list of subrecipients changes annually with each award period. The schedule is also subject to change based on complaints, changes in protocol, patterns indicating noncompliance, direction from FTA, and/or any additional factors.

Metro-North Railroad

The Department meets quarterly with Metro North Railroad (MNR) to review their ongoing compliance with Title VI and discuss the status of any Title VI complaints filed with MNR relative to Connecticut

based activities. The Department reviews the contents of MNR's portion of the Title VI program that reports on the NHL service in Connecticut and monitors their Title VI activities in Connecticut.

Title VI Equity Analysis

During the reporting period, CTDOT did not construct any facilities requiring a Title VI Equity Analysis.

Rail Service Standards and Policies

MTA Metro-North Railroad (MNR) has developed System-wide service standards that apply to MNR operations. CTDOT has adopted these system-wide service standards to apply to the New Haven Line and Shore Line East (SLE) rail services in Connecticut.

Service Availability

Service Availability is a general measure of the distribution of routes within the service areas. These service territories are each defined as all census tracts that are within (and touching) 2.5 miles of the commuter rail stations. The service territory in Connecticut includes all MNR stations in Fairfield and New Haven Counties and the Shore Line East stations from New Haven east to New London. The Rail Service Availability Standard is that the Connecticut Department of Transportation (CTDOT) will distribute rail service so that a majority of residents in the service area are within 2 ½ miles of rail service.

Segment and Branch Line Treatment

The New Haven Line is composed of the New Haven Main Line, part of the North East Corridor (NEC) and the New Canaan Line, Danbury Line, and Waterbury Line which are branch lines feeding into the NEC mainline. Shore Line East is composed of two segments, New Haven east to Old Saybrook, and Old Saybrook east to New London. Stations along each branch line and segment will be analyzed against stations of that same segment or branch. This is due to the different infrastructure capabilities of each segment or branch.

The New Canaan branch is a single track but is electrified and can run the more reliable M8 EMU units, the New Haven Main Line has four tracks but is the busiest single rail line in the country, if not all of North America. The Danbury and Waterbury branch lines are not electrified and must run the P-32 diesel locomotives.

Shore Line East runs to Old Saybrook on either three or four tracks, however between Old Saybrook and New London the service operates on two tracks. No service can be added without the permission of Amtrak who also operates on and owns this territory and the Connecticut Department of Energy and Environmental Protection (DEEP) due to moveable bridges and marine traffic congestion. It is important to note that this is part of the Amtrak North East Corridor and is a vital piece of the Boston to New York to Washington Intercity Passenger Rail service.

Service Periods

New Haven Line Peak Travel

Peak travel is considered to be when inbound trains are scheduled to arrive at Grand Central Terminal (GCT) between 5:30 AM - 10 AM, Monday through Friday, while afternoon peak service is all trains departing GCT between 4:00 PM – 8 PM, all other travel is considered off peak travel.

Shore Line East Peak Travel

Shore Line East determines peak travel for any station by the arrival of the first connecting train on the New Haven Line at GCT during the inbound AM peak travel time period of 5:30 AM and when the last connecting train arrives at GCT on or before 10:00 AM. Afternoon peak service is all connecting trains departing GCT between 4:00 PM – 8 PM, all other travel is considered off peak travel.

On Time Performance (OTP)

On-time performance is a measure of runs completed as scheduled. OTP is a key measure for service reliability to its customers and is the standard the industry uses to compare existing services with other similar competitors. A train is recorded as on time if it arrives at the final destination within five minutes and 59 seconds of scheduled arrival. All trains operated should complete their assigned trips. Unless noted on the timetable, trains will not depart early from passenger stations where they are scheduled to receive passengers.

The On Time Performance goal is 93% for the New Haven Line and Shore Line East.

Vehicle Headway

Vehicle Headway is a measure of how often a train is scheduled to stop at a station. Maximum vehicle headway is based upon the station's level of service (determined by ridership by station or average ridership within specific operating line segments). Factors considered when determining service frequency also include availability of equipment, track scheduling, and operating resources.

Maximum vehicle headway differs for peak, reverse peak, weekday off-peak, and weekends.

Maximum Vehicle Headway Guideline

Table 1 presents the maximum vehicle headway by operating line segment and time of day for MNR NHL stations and Table 2 presents the headway standards for Shore Line East. Headway is determined by arrival time at Grand Central Terminal in New York City for the entire New Haven Line. It is the number of trains that stop at a station divided by the time difference between the first train scheduled to arrive at GCT within the time period (peak or off peak) and the last train to arrive at GCT within the designated time period. Metro North Railroad has defined their peak operating period to be Monday through Friday between 5:30 AM and 10:00 AM.

Table 1: New Haven Line Headway Standards

Line	Peak	Rev. Peak	Off-Peak	Weekend
Inner New Haven (STC-GCT)	20 minutes	30 minutes	60 minutes	60 minutes
Outer New Haven (NHV-STC)	25 minutes	30 minutes	60 minutes	60 minutes
New Canaan Line	30 minutes	60 minutes	60 minutes	60 minutes
Danbury Line	45 minutes	60 minutes	120 minutes	120 minutes

Waterbury Line	45 minutes	60 minutes	120 minutes	120 minutes
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Table 2: Shore Line East Headway Standards

Line Segment	Peak	Rev. Peak	Off-Peak	Weekend
OSB - NLC	143 minutes	180+ minutes	180+ minutes	143 minutes
NHV - OSB	35 minutes	35 minutes	72 minutes	110 minutes

Loading Standards

Loading standards are used to determine seating capacity, to assign equipment (e.g., number/type of railcars), and to make subsequent adjustments by lengthening or shortening trains. Because a primary method of controlling costs is to minimize surplus car-miles while providing a seat for every customer, the assignment of cars and length of trains will be adjusted in accordance with the occupancy policies below.

Train lengths are adjusted to conform to the loading standard using train-by- train ridership data, monitored throughout the year. Train lengths are modified to ensure that adequate seating is provided while controlling the total car-miles operated. There is a minimum of 2-3cars required to operate a train for technical reasons.

Table 3: Maximum Recommended Occupancy Policy

	Lengthening Trains If Occupancy Exceeds...	Shortening Trains If Occupancy (after reduction) Would Not Exceed...
AM Peak, PM Peak, Reverse Peak	95%	95%
Off-Peak Weekday	85%	85%
Weekend	75%	75%

Holiday/Special Event Adjustments: Adjustments to the regular equipment assignments are made to account for changes in travel patterns and demand on holidays and holiday weekends and other special events throughout the year. Load is determined by the maximum number of passengers on board the train at any one time divided by the total number of seats on the train.

Average Age of Fleet

Vehicles are assigned to trains based on required propulsion power (diesel or electric) for the route, individual train ridership and seating capacity, and maintenance and storage yard requirements.

Tables 4 and 5: 2020 Average Fleet Age

Table 4

Equipment Type	Book Count	Average Age	Unit Size	Unit Seating
M-8 EMU (NHL)	275	10	PAIR	A&B UNIT – 110/101
Total Electric Coaches	311			
Bombardier Push/Pull Coach (NHL)	20	33	COACH	Cab 113, Tr. 131
Bombardier Push/Pull Coach (NHL)	20	29	COACH	Cab 113, Tr. 131
Bombardier Push/Pull Center Door Coach (NHL)	8	17	COACH	Cab 99, Trailer 115 Trailer w/ toilet 103
Maersa Push/Pull Coach (SLE)	33	22.5	COACH	Cab 100, Tr. 109
Total Push-Pull Coaches	81			
Total Passenger Vehicles	392			

Table 5

Equipment Type	Book Count	Average Age	Year Rebuilt
GP-40-2H Locomotive (SLE)	6	48	2018 top deck
P-32AC-DM Locomotive (NHL)	4	18	2017 overhaul
P-40 Locomotive (SLE)	8	27	In process
P-40 Locomotive (SLE – ex-NJT)	4	27	In process
BL20-GH Locomotive (NHL/Branch)	6	13	In Process
Total Passenger Diesels	28		

Rail Amenities

Transit amenities are items of comfort and convenience made available to railroad customers.

Amenities available at train stations can include benches, waiting rooms, platform shelters, restrooms, vending machines, information kiosks, recycling/trash bins, public address (PA) speakers, visual information displays, escalators, elevators, and ramps.

The station amenities provided are based on a station's daily ridership, length of platform, and size of station, but may be limited or constrained by physical layout, available space, and utility infrastructure constraints (e.g., local commercial electric power availability). Stations are categorized into levels and stations in the highest ridership category receive the full range of amenities if available space allows.

All trains regardless of car type (coaches or multiple-units) and method of propulsion (diesel or electric) are equipped with similar amenities.

Bus Service Standards and Policies**Service Availability**

Coverage guidelines are only for the bus and bus rapid transit system service area (the urban-fixed route system) where customers are most likely to walk to transit.

An important aspect of providing the region with adequate access to transit services is the geographic coverage of the system. Coverage is expressed as a guideline rather than a standard, because uniform geographic coverage cannot always be achieved due to constraints such as topographical and street network restrictions. In addition, coverage in some areas may not be possible due to the infeasibility of modifying existing routes without negatively affecting their performance.

The Connecticut Department of Transportation (CTDOT) Service Availability Standard requires the distribution of transit service so that a majority of all residents in the service area are within 1/4 mile of local weekday transit service, 1/2 mile of local weekend transit service, and 2 ^{1/2} miles of park and ride stops.

Frequency of Service (Headways)

Ridership should determine the frequency of service on each route, although financial or equipment limitations may sometimes limit the level of service that can be provided.

Headway is the interval of time between two buses running in the same direction on the same route or along the same route corridor (e.g. Routes 60, 62, 64 & 66 along Farmington Avenue in Hartford and West Hartford). Headways for routes with multiple branches are measured along the trunk of the route, with headways along the individual branches standardized to the extent that is practical. Headways are generally based on load factors (i.e. the ratio of customers to seating capacity).

Headways should conform as much as possible to regular intervals to make it easier for customers to understand. Intervals of 5, 10, 15, 20, 30, 40 or 60 minutes are considered ideal, although other headways may be used when better suited to a particular situation.

Loading standards, which are discussed in detail in subsequent sections, are generally used to determine minimum headways. However, for certain service periods and on certain routes, minimum headways should be set by policy. For example, during off-peak periods, ridership may be so light that using the loading standards would result in excessively wide headways. Therefore, in order to provide service in a manner that meets the community's needs, it is necessary to establish policy headways.

CTDOT will provide 60-minute headways during off-peak periods. An exception to this policy would be in rural areas, at night, or on weekends, where financial considerations must be balanced against demand (e.g. Route 96 serving the US 5 corridor in South Windsor). These guidelines do not apply to headways for commuter express routes; express routes normally only operate during peak periods to accommodate work trips.

Table 6: Frequency of Service (Headways)

Service Type	Service Period	Minimum Headway
Local	Weekday - Peak	30 minutes
	All Other	60 minutes
Flyer	All	60 minutes
Express & Commuter Shuttles	Weekday – Peak	3 trips in peak direction

On-Time Performance

CTtransit defines “on-time” as a bus departing a timepoint zero to five minutes later than scheduled. Under no circumstances should buses depart any timepoint ahead of schedule, unless the timepoint for the particular trip has been flagged as “drop off only” and the bus operator is given explicit permission to continue on if early. Late operation is defined as any trip leaving a time point in excess of five minutes beyond the scheduled time. To maintain efficient operation, schedules should be constructed in such a manner so that no bus arrives at the downtown hub more than two minutes early or at any other timepoint more than one minute early.

Table 7: On-Time Performance Measures

Performance Indicator	Downtown Hub	All Other Locations
Early Arrival	>2 minutes	>1 minute
Late Arrival	>5 minutes	>5 minutes
Early Departure	>0 minutes	>0 minutes
Late Departure	>5 minutes	>5 minutes

On-time performance standards can vary with the quantity of service provided. During peak periods, on routes or along corridors with frequent service, it is tolerable to have a lower on-time performance, because buses come frequently. For instance, on routes or along corridors where headways are 10 minutes or less, it is acceptable to have 90% of the service “on-time”. On routes or during times of day that operate where service is less frequent, it is our goal that 95% of service runs “on-time”.

Table 8: On-time Performance Standards

Service Period	Headway		
	< 10 minutes	10 to 29 minutes	30 minutes or more
Weekday Peak	90%	90%	95%
Weekday Off-Peak	90%	95%	95%
Weekend	90%	95%	95%

CTDOT has changed over from manual collection of on-time performance information, to an Automated Vehicle Location (AVL) System. AVL systems collect data on a continuous basis and are used by CTtransit to better refine schedules to reflect on-street conditions by the time of day.

Load Factor

The vehicle load standard applies to the maximum number of passengers allowed on a service vehicle in order to ensure the safety and comfort of customers. The load standard is expressed as the ratio of passengers to the number of seats on the vehicle, and it varies by mode and by time of day. The average of all loads during the peak period should not exceed vehicles’ achievable capacities.

Table 9: Vehicle Capacity

Vehicle Size	Seats	Standees	Total
30'	28	10	38
40'	39	10	49

45'	55	0	55
60'	55	19	74

Table 10: Load Factor Standards

Service Period	Maximum Load Factor	Minimum Load Factor
Weekday Peak	1.33	0.33
Weekday Midday	1.00	0.25
Evening	1.00	0.15
Nights (after 10PM)	1.00	0.15
Weekends	1.00	0.20

System Wide Service Policies

FTA guidance requires that the Connecticut Department of Transportation (CTDOT) adopt system-wide service policies for the distribution of transit amenities and vehicle assignment for each mode to ensure service design and operations practices do not result in discrimination on the basis of race, color, or national origin. Service policies differ from service standards in that they are not necessarily based on a quantitative threshold.

Transit Amenities Policy

FTA guidance requires CTDOT to set a policy to ensure equitable distribution of transit amenities across the system. Transit amenities are described as follows in FTA Circular 4702.1B:

Transit amenities refer to items of comfort, convenience, and safety that are available to the general riding public. Transit amenities include shelters, benches, trash receptacles, and other bus stop, rail and rapid transit station amenities such as electronic message signs. Fixed-route transit providers must set a policy to ensure equitable distribution of transit amenities across the system. Transit providers may have different policies for the different modes of service that they provide. The policy for transit amenities addresses how amenities are distributed within a transit system, and the manner of their distribution determines whether transit users have equal access to these amenities.

Generally, the installation of transit amenities along bus routes and in rail services is based upon several factors, i.e. the number of passenger boardings at stops or stations along the routes, transfer activity at designated stops, staff recommendations, individual requests, proximity to major activity centers, and local control in the case of local bus stop shelters, which to date, are placed by municipalities and not the transit system. CTDOT strives to provide adequate amenities to meet the various needs of its customers and will review a need for changes as expressed by ridership figures and feedback from riders.

Bus Stop Shelters: With the exception of a few bus shelters in the Hartford Division, CTDOT and CTtransit do not own or maintain any of the on-street bus shelters along bus routes. CTDOT does install and maintain shelters at park and ride lots and maintains bus stop signage on state roads and U.S.-numbered highways throughout the state. The decision to install a shelter at a local bus stop is at the discretion of

local municipalities. CTtransit works with regional agencies and individual towns to encourage shelter installations that meet policy guidelines and to encourage that shelters are cleaned and maintained, including snow removal, on a regular basis, however, it is ultimately the responsibility of the host municipality to maintain the shelters.

CTDOT policy states that shelters are considered for installation based on the criteria detailed in the CTtransit Service Standards guide:

Table 11: Bus Shelter Priority Guide

Daily Customer Boardings	Headway		
	<10 minutes	10-29 minutes	30 minutes or more
300 or more	2	1	1
200-299	3	2	1
100-199	4	3	2
50-99	4	3	2
25-49	4	4	3

The priority guide generally supports the following:

- Stops served by routes with longer headways have priority over stops with shorter headways in order to provide protection for those customers with potentially longer wait times
- Stops with more activity have priority over stops with less activity, with all other factors being equal, in order to provide protection to a larger number of customers.

Benches and Trash Receptacles: CTDOT does not place trash receptacles or benches at bus stops but does have such amenities at all fixed-guideway stops including CTfastrak stations and rail stations.

Electronic Signage: Electronic signage informing passengers of the predicted arrival of the next bus or train, or for relaying service status information can significantly improve the experience for customers. The current policy is to install electronic signage only at CTfastrak rapid transit stations, rail stations and multimodal terminals. If and when CTDOT is in a position to introduce a comprehensive, system-wide electronic signage program, new policies will be developed to ensure equitable siting.

Automated Announcements and Vehicle Location Equipment: All buses have automated bus stop announcements on board, and automated bus route identification announcements off-board. All buses have automatic vehicle location equipment which allow bus location to be tracked and provide real-time information to customers on next bus arrivals.

USB Charging Ports and Wi-Fi: There is only one situation where amenities vary by bus type and service type. Commuter coaches on longer-distance multi-zone routes have cushioned seats and USB charging ports and Wi-Fi. CTDOT installed these amenities due to the trip lengths and the premium fares charged. In 2019, CTDOT began including USB charging ports on all new vehicles, regardless of service type. CTDOT has also begun to make Wi-Fi available on local buses. Wi-Fi has been added to local buses serving Hartford, New Haven and Stamford and is in process for other CTtransit divisions.

Parking: At this point CTDOT provides parking only at commuter Park and Ride lots, and rail and rapid transit stations. These are locations where the customary method of access to the bus and rail system is by car. Parking is available at most rail and rapid transit stations. The stations where parking is not available are those where no land is available, or in areas where the customary means of access is by walking or by using other transit connections.

Rail Amenities: Amenities available at train stations can include benches, waiting rooms, platform shelters, restrooms, vending machines, information kiosks, recycling/trash bins, public address (PA) speakers, visual information displays, escalators, elevators, and ramps. The station amenities provided are based on a station's annual ridership, length of platform, and size of station; but may be limited or constrained by the physical layout, space available, and/or utility infrastructure constraints (e.g., local commercial electric power availability). Station amenities on rail are line specific. Stations are categorized into levels. Stations in the highest ridership (over 1,000,000 annually) category receive the full range of amenities if available and space allows. Those between 100,000 and 999,999 riders annually receive most of the amenities, those below 100,000 riders annually may receive the least amenities. Amenities onboard trains include heating and air conditioning, interior lighting, bathrooms, baggage racks, and public address systems. All trains regardless of car type (coaches or multiple-units) and method of propulsion (diesel or electric) are equipped with similar amenities.

Vehicle Assignment Policy

As specified by FTA Circular 4702.1B, vehicle assignment refers to the process by which transit vehicles are placed into service in depots and on routes throughout the transit provider's system. The *CTtransit* Service Standards Guide notes that buses will be assigned to service without regard to race, color or national origin of riders or the communities they serve.

Bus Assignment

Through several practical operational considerations, *CTtransit* assigns buses to service so that the average age of the buses serving each route does not exceed the average age of the fleet.

Vehicles are parked in line, front to back upon pull-in, and are assigned by pull-out time, according to the vehicle characteristic. This practice provides for a random bus assignment. Bus assignments do however consider the operating characteristics of buses of various lengths and heights which are matched to the operating characteristics of the route (ridership volumes, turn restrictions, type of service and platform levels). Some of these considerations include:

- Hybrid vehicles are not permitted on routes with clearance restrictions.
- CTfastrak buses are specifically designed and branded for the busway and used exclusively in that service.
- Downtown circulator branded bus service.
- Express coach buses are specifically designed for express service.
- Articulated buses are deployed exclusively on routes with supportive ridership volumes.

Based upon the needs of the service (vehicle capacity needs, local roadway conditions, etc.) specific sub-fleets of buses are dedicated to commuter express, bus rapid transit, commuter connection or shuttle service (e.g. the Star Shuttle or railroad Commuter Connection shuttles) which require specific types, brands or sizes of vehicles. Otherwise, within similar service styles, individual vehicles are not assigned to specific routes and circulate among the various routes in the system based upon operating

constraints and equipment features. The exception being that within the same type of service, such as local fixed-route in urban areas, buses with higher seating capacities are assigned to routes or individual bus trips with the highest historic customer demand.

CTtransit currently has five general types of buses in the fleet:

- 30-foot low-floor transit coaches
- 35-foot low-floor transit coaches
- 40-foot low-floor transit coaches
- 45-foot high-floor commuter coaches
- 60-foot low-floor articulated coaches

When CTtransit began operating articulated buses, these high-capacity vehicles were assigned to high-ridership routes or portions of routes where additional seating would alleviate overcrowding conditions.

As replacement buses are purchased and placed into service, they are distributed among all routes where the older bus being replaced had previously operated. On weekends and holidays, when bus requirements are lower, newer buses are used first before older equipment is dispatched.

Vehicle assignment data is analyzed as part of Title VI monitoring. The average vehicle age by route on routes that serve minority areas is compared to the average vehicle age on routes that serve non-minority areas. If the data demonstrates a disparity based on vehicle age for vehicle assignments on routes serving minority areas, CTDOT will review the distribution of vehicles and the way vehicles are assigned within each facility to evaluate the source of the problem. Appropriate actions would then be taken to modify either the distribution of vehicles to facilities or the route assignments of vehicles within each facility. Follow-up monitoring would be conducted six months later to determine whether the disparity has been rectified.

Rail Vehicle Assignment

CTDOT operates two passenger rail services – the New Haven Line which is operated under contract by MTA Metro-North and Shore Line East which is operated under contract by Amtrak.

The New Haven Line operates mainline service with electric multiple-unit (EMU) cars operating under catenary. The New Haven Line also has three branch lines – the New Canaan Line which is also an electric fleet and the Danbury and Waterbury branch lines which operate diesel locomotive and push- pull passenger coaches.

The primary criterion in assigning transit vehicles is the type of propulsion power required for a particular branch or line segment. Diesel locomotive-hauled coaches are used on non-electrified territory including the Danbury Branch and Waterbury Branch on MNR and on Shore Line East. The EMU vehicles are used on electrified territory (all remaining lines/branches). Where a train operates over electrified and non-electrified territory, diesel locomotive hauled coaches must be assigned.

Vehicles are assigned as required, with seating capacity and maintenance cycles driving the assignments. Cars are not assigned to specific routes or branches within electric or diesel territory but are cycled from line/branch to line/branch to achieve optimum car utilization efficiency. Short-term rolling stock assignment plans are developed for deployment of railcars.

Vehicles are assigned to trains based on the required propulsion power (diesel or electric) for the route,

individual train ridership and seating capacity, and maintenance and storage yard requirements, not age. However, the majority of the electric fleet on the New Haven Line is new within the past five years. Mainline trains all serve the same service area, there is no difference in the quality of the railcar that is dispatched for any given train consist.

Shore Line East operates a diesel fleet and push-pull passenger coaches of similarly aged equipment on a single line. Since all trains serve largely the same service area, there is no opportunity for dispatching substantially differently aged equipment to serve any population segment.

Given the different operating environments of the two different rail services, the equipment is generally not interchangeable.

In Connecticut, diesel and electric powered trains are operated on the NHL and SLE rail services. The primary criterion in assigning transit vehicles is the type of propulsion power required for a particular branch or line segment. Diesel locomotive-hauled coaches are used on non-electrified territory including the Danbury Branch and Waterbury Branch on MNR and on Shore Line East. Electric Multiple-Unit (EMU) vehicles are used on electrified territory (all remaining lines/branches). Where a train operates over a combination of electrified and non-electrified territory, diesel locomotive hauled coaches must be assigned.

The following vehicles are assigned by service as follows:

- M-8 EMU/M-2 EMU operate on the New Haven Main Line and the New Canaan Branch Line.
- All Bombardier Push/Pull Coaches operate on the Danbury Branch and Waterbury Branch with limited Main Line use.
- P-32AC-DM Diesel Locomotives operate on the Danbury Branch and Waterbury Branch Lines with limited Main Line use.
- BL20-GH Diesel Locomotives operate on the Danbury Branch and Waterbury Branch Lines with limited Main Line use.
- The Mafersa Push/Pull coaches operate on the Shore Line East and have limited operation on the New Haven Main Line.
- GP-40-2H Diesel Locomotives operate on the Shore Line East and have limited operation on the New Haven Main Line.
- All P-40 Diesel Locomotives operate on the Shore Line East and have limited operation on the New Haven Main Line.

Bus Service Monitoring Report

This report presents the findings of the Title VI service monitoring analysis for the Hartford and New Haven Divisions of CT*transit*. The transit service for each route and time period were compared against service standards for frequency/headway, schedule adherence and load factor. Average vehicle age was monitored against CTDOT's vehicle assignment policy. Routes were categorized into minority-serving or non-minority-serving routes to identify if there was a disparate impact in service between the two categories.

Service measures were derived from General Transit Feed Specification (GTFS), automated vehicle location systems (AVL) and automated passenger count (APC) data to calculate frequency/headway of

routes, average on-time percentages, load factors, and vehicle age. Summary results are presented below and the results for each individual route are presented in pages 245-281 of the CTDOT FTA Title VI Program Appendix.

Methodology for Classifying Routes as Minority and Non-Minority

Minority-serving routes were identified as those which had more than 33⅓% of route miles in minority census tracts. Minority tracts were identified as minority if the percentage of minority residents exceeded the average State minority percentage of 33.323%. Since the path of a route may change depending on time of day, minority-serving status was identified by route and service time period. Most routes had a consistent minority-serving status regardless of the time of day. Routes that did have varying minority-serving status are shown in Table 12. Frequently this variation was due to lifeline services, where a portion of weekly trips follows an extended route that is intended to reach underserved areas.

Table 12: Routes with Varying Minority-serving Status

Division	Routes
Hartford	45, 53-55, 60-66, 905, 912
New Haven	204, 213, 215, 224

Both service standard and disparate impact analyses examine routes by time periods. Time periods are defined in Table 13.

Table 13: Time Period Definitions

Day	Time Period	Start	End
Weekday	Early AM	4:00 AM	6:29 AM
	AM Peak	6:30 AM	8:59 AM
	Midday	9:00 AM	2:02 PM
	Midday School	2:03 PM	3:59 PM
	PM Peak	4:00 PM	6:29 PM
	Evening	6:30 PM	9:59 PM
	Night	10:00 PM	2:00 AM
Saturday	Morning	4:00 AM	8:59 AM
	Daytime	9:00 AM	5:59 PM
	Evening	6:00 PM	9:59 PM
	Night	10:00 PM	2:00 AM
Sunday	Morning	4:00 AM	8:59 AM
	Daytime	9:00 AM	5:59 PM
	Evening	6:00 PM	9:59 PM

Night	10:00 PM	2:00 AM
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Frequency of Service/Headway

The frequency of service/headway standard is based on the service type and the service period, as shown in Table 14.

Table 14: Frequency of Service Standard

Service Type	Service Period	Minimum Headway
Local	Weekday – Peak	30 minutes
	All Other	60 minutes
Flyer	All	60 minutes
Express & Commuter Shuttles	Weekday – Peak	3 trips in peak direction

The percentages of all, minority-serving and non-minority-serving routes that meet this service standard are shown in Table 15. More minority-serving routes meet the frequency standard than non-minority-serving routes.

Table 15: Percent of Routes Meeting Frequency Standard

System	All (%)	Minority-serving (%)	Non-minority-serving (%)
Hartford	65	66	58
New Haven	62	63	58

Schedule Adherence/On-time Percentage

The schedule adherence (on time percentage) service standard is based on the on time percentage of a route given the time period and route headway, as shown in Table 16. The on-time percentage varies by frequency of service (headway).

Table 16: Schedule Adherence (On-time Percentage) Service Standard

Service Period	Headway (%)		
	<10 minutes	10-29 minutes	30 minutes or more
Weekday Peak	90	90	95
Weekday Off-Peak	90	95	95
Weekend	90	95	95

The percentages of all, minority-serving and non-minority-serving routes that meet this service standard are shown in Table 17. Almost no routes, minority-serving or not, met the standards. In the past, schedule adherence was measured by supervisors checking buses against schedules at timepoints. With

the introduction of automatic vehicle location (AVL) systems, schedule adherence is continuously tracked. The technology can be so sensitive, that if a driver rolls forward a few feet to allow a bus in behind them, the AVL will conclude that the bus left early. CTDOT will not change the schedule adherence standard but will be refining the AVL system to improve the accuracy of the data by doing the following:

1. Review all the geographic boundaries of trigger boxes at time point in each division. These trigger boxes are used to indicate if the bus has arrived and departed from the bus stop/timepoint at the scheduled time. It has been determined that some trigger boxes are not in line with the actual stop. This can result in inaccurate on time performance information. This can be done by either the bus not pulling into the trigger box then indicating it is late (once it passes through the trigger box) or pulling past the trigger box and boarding passengers which would result in early departure. The new ITS system allows the integration of a satellite image which allows for better alignment of the trigger box to the actual stop.
2. Explore an increased ping rate from 30 seconds to 10 seconds. This ping rate is the frequency in which information is passed back to the system for internal and external use. This increase in data points will aid in the creation of new running times and schedules.

Table 17: Percent of Routes Meeting Schedule Adherence Standard

System	All (%)	Minority-serving (%)	Non-minority-serving (%)
Hartford	1	1	0
New Haven	0	0	0

Load Factor

The load factor standard is based on the proportion of passengers-to-vehicle capacity given the time period, as shown in Table 18.

Table 18: Load Factor Service Standard

Service Period	Maximum Load Factor
Weekday Peak	1.33
Weekday Midday	1.00
Evening	1.00
Nights (after 10 PM)	1.00
Weekends	1.00

The percentages of all, minority-serving and non-minority routes that meet this service standard are shown in Table 19. Almost all routes met the load factor standard.

Table 19: Percent of Routes Meeting Load Factor Standard

System	All (%)	Minority-serving (%)	Non-minority-serving (%)
Hartford	99	99	100
New Haven	100	100	100

Vehicle Assignment Policy

Through several practical operational considerations, CT*transit* assigns buses to service so that the average age of the buses serving each route does not exceed the average age of the fleet.

Vehicles are parked in line, front to back on pull-in, and assigned by pull-out time, according to the vehicle characteristic. This practice provides for a random bus assignment. Bus assignments do however consider the operating characteristics of buses of various lengths and heights which are matched to the operating characteristics of the route (ridership volumes, turn restrictions, type of service and platform levels). Some of these considerations include:

- Hybrid vehicles are not permitted on routes with clearance restrictions
- CTfastrak buses are specifically designed and branded for the busway and used exclusively in that service
- Downtown circulator branded bus service
- Express coach buses are specifically designed for express service
- Articulated buses are deployed exclusively on routes with supportive ridership volumes.

Table 20 Average Vehicle Age

System	Average Fleet Age (Years)	Average Vehicle Age on Minority Serving Routes (Years)	Average Vehicle Age on Non-Minority Serving Routes (Years)
Hartford	5.2	5.6	5.2
New Haven	2.5	2.5	2.5

Disparate Impact Analysis

Disparate impact between minority and non-minority-serving routes was analyzed for the schedule adherence and load factor service measures as well as for the average route vehicle age. If the service measure for minority-serving routes was 15% worse than the service measure for non-minority-serving routes, that would signify a disparate impact. The percent difference was calculated differently for different performance measures.

Schedule Adherence/On-time Percentage

For the schedule adherence service measure the percent difference is calculated as shown below, where the proportion of on-time trips for minority-serving routes is subtracted from that of the non-minority-serving routes and then divided by the minority-serving route value.

$$\frac{N - M}{M} \times 100 = \text{On-Time Disparate Impact Percent Difference}$$

where M is the on-time proportion for minority-serving routes and N is the value for non-minority-serving routes.

Here is an example calculation for the on-time service measure. If the proportion of on-time trips is 0.80 for minority-serving routes and 0.85 for non-minority-serving routes, then the difference is +0.05. Dividing this difference (0.05) by the minority-serving route value (0.80) and multiplying by 100 gives 6.25%. Since this value (6.25%) is lower than the 15% difference threshold there is no disparate impact.

Vehicle Age and Load Factor

For vehicle age and load factor service measures, the percent difference was calculated slightly differently. This is because lower values for vehicle age and load factor are desirable while a high value is favored for on-time percentage. The percent difference for vehicle age and load factor was calculated as shown below, where the service measure for non-minority-serving routes was subtracted from that of the minority-serving route and then divided by the minority-serving route value.

$$\frac{M - N}{M} \times 100 = \text{Veh Age \& LF Disparate Impact Percent Difference}$$

where M is vehicle age or load factor for minority-serving routes and N is the value for non-minority-serving routes.

Hartford Division Disparate Impact Analysis Results

The results of the disparate impact analysis for the Hartford transit division are shown in Table 21. Time periods where there is a disparate impact are highlighted in red. On-time proportion exceeds the disparate impact threshold for three time periods. This could be due to pulsed scheduling, where the arrival time of one bus can affect the departure time of several other buses on a number of routes. For reference, the average fleet vehicle age is 5.2 years. The average fleet vehicle age for the Hartford Division was calculated by averaging the vehicle ages reported in Table 10. Most of the time periods have a disparate impact regarding load factor since the busiest transit routes go through minority census tracts, but none of the minority serving routes go over the load factor standard. While larger disparate impacts occur on Saturday night and Sunday, during those service hours the service frequency standard is 60-minute service.

In the Hartford system, weekday nights have a disparate impact due to sub-fleets that are younger than the average age of buses in the system operating when fewer buses are operating overall.

Table 21: Disparate Impact Service Monitoring Analysis, Hartford Transit Division

Day	Time	Total Minority Routes	Total Non-	Minority On-time	Non-minority On-time	% Difference	Minority Vehicle	Non-Minority Vehicle	% Difference	Minority Max LF	Non-Minority Max LF	% Difference

			minority Routes				Age (years)	Age (years)				
Weekday	Early AM	49	10	0.78	0.70	-10	7	6	14	0.40	0.30	25
Weekday	AM Peak	58	9	0.70	0.59	-15	7	6	14	0.67	0.44	33
Weekday	Midday	45	9	0.68	0.63	-7	6	6	0	0.84	0.57	32
Weekday	Midday School	53	8	0.62	0.74	19	7	7	0	0.84	0.67	21
Weekday	PM Peak	56	11	0.57	0.54	-4	7	7	0	0.89	0.70	22
Weekday	Night	30	2	0.64	0.83	30	6	5	17	0.88	1.00	-13
Saturday	Morning	37	3	0.74	0.69	-6	5	5	0	0.34	0.28	19
Saturday	Daytime	38	5	0.65	0.54	-18	5	5	0	0.77	0.74	4
Saturday	Evening	37	3	0.56	0.56	1	5	4	20	0.77	0.52	33
Saturday	Night	23	5	0.58	0.65	11	5	4	20	0.75	0.49	35
Sunday	Morning	28	3	0.70	0.81	15	5	4	20	0.45	0.19	58
Sunday	Daytime	28	4	0.57	0.57	-1	5	5	0	0.79	0.36	54
Sunday	Evening	26	3	0.67	0.66	-2	5	4	20	0.83	0.47	44
Sunday	Night	2	0	0.51	NA	NA	3	NA	NA	0.77	NA	NA

New Haven Division Disparate Impact Analysis Results

The results of the disparate impact analysis for the New Haven transit division are shown in Table 22. Time periods where there is a disparate impact are highlighted in red. For reference, the average fleet vehicle age is 2.5 years. The average fleet vehicle age for the New Haven Division was calculated by averaging the vehicle ages reported in Table 22.

Table 22: Disparate Impact Service Monitoring Analysis, New Haven Transit Division

Day	Time	Total Minority Routes	Total Non- minority Routes	Minority On-time	Non- minority On-time	% Differ- ence	Minority Vehicle Age (years)	Non- Minority Vehicle Age (years)	% Differ- ence	Minority Max LF	Non- Minority Max LF	% Difference
Weekday	Early AM	19	6	0.74	0.72	-2	3	4	-33	0.43	0.47	-9
Weekday	AM Peak	21	5	0.69	0.63	-9	3	4	-33	0.83	0.77	8
Weekday	Midday	20	5	0.60	0.51	-15	3	3	0	0.97	1.00	-3

Weekday	Midday School	20	5	0.54	0.47	-13	3	3	0	0.96	0.96	-1
Weekday	PM Peak	20	6	0.53	0.48	-10	3	3	0	0.95	0.94	0
Weekday	Evening	18	6	0.51	0.50	-2	3	3	0	0.87	0.94	-8
Weekday	Night	13	1	0.42	0.46	9	3	3	0	0.93	1.00	-8
Saturday	Morning	19	4	0.73	0.67	-8	2	2	0	0.45	0.54	-19
Saturday	Daytime	17	5	0.59	0.43	-27	2	2	0	0.93	0.93	-1
Saturday	Evening	17	3	0.43	0.34	-22	2	2	0	0.80	0.87	-9
Saturday	Night	8	1	0.29	0.16	-43	2	2	0	0.64	0.25	62
Sunday	Morning	11	3	0.55	0.51	-8	2	2	0	0.55	0.30	45
Sunday	Daytime	11	3	0.39	0.43	10	2	2	0	0.81	0.67	18
Sunday	Evening	10	1	0.36	0.49	36	2	2	0	0.71	0.39	46
Sunday	Night	7	1	0.39	0.35	-9	2	1	50	0.52	0.09	83

Rail Service Monitoring

This document provides the monitoring results for rail service. Rail service was compared to service standards for frequency/headway, schedule adherence/on time performance, and load factor. Stations were categorized by minority-serving or non-minority-serving stations to identify if there was a disparate impact in service between the two categories.

Service measures were derived from end point train time arrivals, manual passenger count data, and public times tables to calculate frequency/headway of routes, average on-time percentages, load factors, and vehicle age. The results are summarized below.

Methodology for Classifying Stations as Minority and Non-Minority

Minority serving stations were identified as those with more than 33.33% of minority census tracts within the 2 ½ mile service area. Census tracts were classified as minority census tracts if the total minority percentage exceeded the state average. Rail stations are structures located on fixed guideways. Many of these stations are historic and have been in the same location for decades.

Table 23: Rail Line Stations Demographics

Rail Line	Minority Serving Stations
Shore Line East	33.33% of all stations served
Outer New Haven Line	76.47% of all stations served
Inner New Haven Line	80.00% of all stations served

New Canaan Branch	50% of all stations served
Danbury Branch	28.57% of all stations served
Waterbury Branch	33.33% of all stations served

The New Haven Line is divided into the Inner New Haven Line segment from Stamford to Grand Central Terminal (GCT) in New York City and the Outer New Haven Line from New Haven to Stamford. These segments have different headway standards that were developed by Metro North Railroad. The majority of the Inner New Haven Line rail service serves stations within the state of New York. The other measures do not have separate standards for these two sections of the mainline. The peak service time periods for both the New Haven Line and Shore Line East are defined by that train or a connection from that train arriving at Grand Central Terminal (GCT) in New York City between the hours of 6:00 AM and 10:00 AM or departing from GCT between the hours of 4:00 PM and 8 PM.

Disparate Impact

Disparate impact between minority serving stations and non-minority-serving stations was analyzed for the headway, on time performance, and load factor service measures. If the service measure for minority serving stations was more than 15% worse than the measure for non-minority serving stations, that would signify a disparate impact. For example, if the Shore Line East peak period headways at minority serving stations were 35 minutes and the headways were 25 minutes at non-minority serving stations, the headway difference would be 10 minutes which is 40% worse for the minority serving stations. This would be deemed a disparate impact since it is higher than the 15% threshold.

Please note that New London station on Shore Line East is the only station on that Shore Line East branch service with less service than the rest of the Line. Additionally, it is important to note that the Inner New Haven Line service is only partially in the state of Connecticut. The majority of the Inner New Haven Line service is within the state of New York and is included in the Metropolitan Transit Authority (MTA) Title VI plan.

On Time Performance is based on end point arrival times. This assigns the same values from a train to every station the train stops at. Nearly all New Haven Line trains begin or end at Grand Central Terminal (GCT) in New York City.

Vehicle Assignment is solely based on the equipment type required by the infrastructure and service (Shore Line East and New Haven Line).

Monitoring Results

Frequency of Service/Headway

New Haven Line

The frequency of service/headway standard for each line is based on the service type and the service period, as shown in Tables 24 and 25.

Table 24: New Haven Line Headway Standards

New Haven Line	Peak	Rev. Peak	Off-Peak	Weekend
Inner New Haven (STC-GCT)	20 minutes	30 minutes	60 minutes	60 minutes
Outer New Haven (NHV-STC)	25 minutes	30 minutes	60 minutes	60 minutes
New Canaan Branch	30 minutes	60 minutes	60 minutes	60 minutes
Danbury Branch	45 minutes	60 minutes	120 minutes	120 minutes
Waterbury Branch	45 minutes	60 minutes	120 minutes	120 minutes

Table 25: Outer New Haven Line Headway Comparison

Stations	Peak	Reverse	Off peak	Weekend
Minority serving	19 Minutes	25 Minutes	37 Minutes	41 Minutes
Non-minority serving	22 Minutes	31 Minutes	42 Minutes	48 Minutes

On the Outer New Haven Line minority serving stations average better headways than non-minority serving stations. There is no finding of disparate impact for headway along the outer New Haven line.

Table 26: Inner New Haven Line Headway Comparison

Stations	Peak	Reverse	Off peak	Weekend
Minority serving	15 Minutes	21 Minutes	29 Minutes	32 Minutes
Non-minority serving	13 Minutes	14 Minutes	26 Minutes	36 Minutes

On the Inner New Haven Line, peak headways for minority serving stations is 15 minutes and 13 minutes for the non-minority serving stations. Additionally, the reverse peak headways for minority serving stations is 21 minutes and the reverse peak headway for non-minority serving stations is 14 minutes. These differences are above the 15% threshold and represent a disparate impact.

Greenwich (the sole non-minority serving station) ranked third in annual ridership for Connecticut New Haven Line stations, with 2,443,418 riders in 2019. The only stations with more New Haven Line riders in Connecticut, in 2019, were Stamford Transportation Center and New Haven Union station. Greenwich is also the closest rail station to GCT in Connecticut. It should be noted that most of the Inner New Haven Line stations are within the state of New York and are not included in Connecticut reporting. Also, Stamford Transportation Center (a minority serving station) has better headways in every time period than Greenwich. The Office of Rail believes the finding of disparate impact is the result of Greenwich being the sole non-minority serving station on the Inner New Haven Line in the state, high ridership

demand at this station, station geography, and the New York state New Haven Line stations not being included in the calculations.

Table 27 shows the average headways for New Haven Line mainline by station.

Table 27: New Haven Line Headways (Minutes)

Stations	Peak	Reverse	Off Peak	Weekend
New Haven-State St.	N/A	N/A	N/A	N/A
New Haven	16	22	39	36
West Haven	16	22	35	37
Milford	18	24	35	36
Stratford	18	24	35	37
Bridgeport	13	21	34	36
Fairfield Metro	16	24	35	37
Fairfield	16	25	35	37
Southport	25	36	49	60
Green's Farms	25	39	48	60
Westport	20	27	35	37
East Norwalk	22	34	51	60
South Norwalk	13	21	34	37
Rowayton	32	39	52	60
Darien	25	27	35	37
Noroton Heights	30	29	48	60
Stamford	6	10	17	19
Old Greenwich	18	25	33	36
Riverside	18	25	33	36
Cos Cob	18	25	33	36
Greenwich	13	14	26	36

Table 28: New Canaan Branch Comparison

New Canaan Stations	Peak	Rev. Peak	Off-Peak	Weekend
Minority serving	41 minutes	42 minutes	61minutes	60 minutes
Non-minority serving	41 minutes	42 minutes	61 minutes	60 minutes

New Canaan Branch Line trains stop at every station. This keeps headways the same, or nearly the same, for every station on the line. There was no finding of disparate impact for headways on the New Canaan branch line.

Table 29: Danbury Branch Comparison

Danbury Stations	Peak	Rev. Peak	Off-Peak	Weekend
Minority serving	43 minutes	66 minutes	101 minutes	186 minutes
Non-minority serving	42 minutes	67 minutes	102 minutes	186 minutes

Danbury Branch Line trains stop at every station. This keeps headways the same, or nearly the same, for every station on the line. There is no finding of disparate impact for headway on the Danbury branch line.

Table 30: Waterbury Branch Comparison

Waterbury Stations	Peak	Rev. Peak	Off-Peak	Weekend
Minority serving	109 minutes	155 minutes	153 minutes	180 minutes
Non-minority serving	109 minutes	155 minutes	153 minutes	180 minutes

Waterbury Branch Line trains stop at every station. This keeps headways the same, or nearly the same, for every station on the line. There is no finding of disparate impact for headway on the Waterbury branch line. Below are the averaged headways, by station for the New Haven Branch Lines.

Table 31: New Haven Branch Lines Averaged Headways

New Canaan				
Stations	Peak (Minutes)	Reverse (Minutes)	Off-Peak (Minutes)	Weekend (Minutes)
New Canaan	41	42	61	60
Talmadge Hill	41	42	61	60
Springdale	41	42	61	60
Glenbrook	41	42	61	60
Danbury				
Stations	Peak (Minutes)	Reverse (Minutes)	Off-Peak (Minutes)	Weekend (Minutes)
Danbury	43	65	101	186
Bethel	43	66	102	186
Redding	43	66	102	186
Branchville	42	66	102	186
Cannondale	42	66	102	186
Wilton	42	67	102	186
Merritt 7	42	67	102	186
Waterbury				
Stations	Peak (Minutes)	Reverse (Minutes)	Off-Peak (Minutes)	Weekend (Minutes)
Waterbury	109	155	153	180

Naugatuck	109	155	153	180
Beacon Falls	109	155	153	180
Seymour	109	155	153	180
Ansonia	109	155	153	180
Derby	109	155	153	180

Shore Line East Headway

Shore Line East station headways on the New Haven to Old Saybrook section are shown in Table 33. The only time non-minority serving stations receive more timely service is the weekday off-peak service. The difference is 5 minutes, which is 7.5% more favorable than minority serving stations but is below the threshold to be considered a disparate impact.

Table 32: Shore Line East Headway Standards

Line Segment	Peak	Rev. Peak	Off-Peak	Weekend
NHV - OSB	25 minutes	30 minutes	60 minutes	60 minutes

Table 33. Shore Line East NHV – OSB Segment Headway Comparison

SLE stations	Peak	Rev. Peak	Off-Peak	Weekend
Minority serving	32 minutes	48 minutes	72 minutes	104 minutes
Non-minority serving	33 minutes	48 minutes	67 minutes	106 minutes

Table 34: Shore Line East Headways by Station

Station	Peak (Minutes)	Reverse (Minutes)	Off-peak (Minutes)	Weekend (Minutes)
<i>New London</i>	61	132	178	137
Old Saybrook	32	50	64	106
Westbrook	32	48	64	105
Clinton	33	48	55	108
Madison	32	48	54	108
Guilford	33	48	63	106
Branford	33	48	64	104
New Haven State	32	48	64	103
New Haven Union	33	48	64	104

The New London Station is the only minority station served on the Old Saybrook to New London segment by Shore Line East. There is limited weekday service to New London station. It cannot be

compared to any other station as it has a unique headway standard significantly different from the rest of the Shore Line East rail service. Adding frequencies to this station has significant obstacles including infrastructure limitations involving moveable bridges, and limited switches. Additionally, there were some Amtrak regional trains that cross honored Shore Line East multi-ride fare types that cannot be considered in this study during this period.

Schedule Adherence/On-time Performance

The On-Time Performance (OTP) service standard for the New Haven Line (including branch lines), and Shore Line East is 93%. A train is considered on time if it arrives at its final destination within 5 minutes and 59 seconds of the scheduled arrival time. There are certain data limitations for monitoring when OTP is based off end point arrival times.

CTDOT policy is that every train makes every station stop on both Shore Line East and the Branch Lines. This policy ensures that all stations receive equal treatment. This policy is not practical to apply on both the New Haven Line mainline due to passenger volume, train traffic, and travel time, among other factors. Nearly all mainline trains have GCT as one end point.

New Haven Line OTP

The New Haven Line is divided into both the Inner New Haven Line from Stamford to GCT and the Outer New Haven Line from New Haven Union Station to Stamford. There are different headway standards for these two segments of the New Haven mainline service. It is important to note that New Haven State Street station is included in the Shore Line East analysis and most of the service at that station is Shore Line East. The OTP analysis is done by station by service period. Each train endpoint OTP value for the 3-year period was assigned to every station the train stopped at. The OTP values of all trains stopping at the station were then averaged based upon the service period. These OTP values at the stations are then averaged by minority serving and non-minority serving designation.

Table 35: Inner New Haven Line OTP Comparison

Station	Peak	Reverse	Off Peak	Weekend
Minority serving	92.33%	94.64%	92.25%	96.94%
Non-Minority serving	92.01%	94.26%	91.35%	97.27%

The Inner New Haven Line has minority serving stations averaging better on time percentage than non-minority serving stations during peak, reverse peak, and off-peak, while non-minority serving stations had better weekend OTP. The difference between the station on time percentages is below the 15% threshold percent during peak service periods.

Table 36: Outer New Haven Line OTP Comparison

Station	Peak	Reverse	Off Peak	Weekend
Minority serving	91.30%	93.16%	89.82%	94.60%
Non-Minority serving	91.32%	93.61%	90.34%	94.47%

The Outer New Haven Line has minority serving stations average better OTP on weekends, while non-minority serving stations average better OTP on Peak, reverse peak, and off-peak service. The difference between the station on time percentages is below the 15% threshold.

Table 37: New Haven Line OTP by Station

Average OTP by Trains Stopping at:				
Station	Peak	Reverse	Off Peak	Weekend
New Haven State Street	N/A	N/A	N/A	N/A
New Haven Union Station	91.65%	92.82%	89.22%	94.48%
West Haven	91.65%	92.82%	89.22%	94.48%
Milford	91.65%	92.82%	89.22%	94.48%
Stratford	91.65%	92.82%	89.22%	94.48%
Bridgeport	91.56%	92.82%	89.25%	94.48%
Fairfield Metro	91.40%	92.82%	89.25%	94.48%
Fairfield	91.35%	92.82%	89.25%	94.48%
Southport	91.04%	94.37%	91.46%	94.47%
Green's Farms	91.04%	94.42%	91.46%	94.47%
Westport	91.53%	92.82%	89.23%	94.48%
East Norwalk	91.15%	94.37%	91.46%	94.47%
South Norwalk	90.73%	92.82%	89.13%	94.48%
Rowayton	91.12%	94.42%	91.21%	94.47%
Darien	91.28%	92.82%	89.02%	94.48%
Noroton Heights	91.20%	92.82%	90.94%	94.47%
Stamford	90.88%	93.76%	90.68%	95.94%
Old Greenwich	92.81%	94.93%	92.77%	97.27%
Riverside	92.81%	94.93%	92.77%	97.27%
Cos Cob	92.81%	94.93%	92.77%	97.27%
Greenwich	92.01%	94.26%	91.35%	97.27%

Table 38: New Canaan Branch Comparison

New Canaan Branch Line OTP Analysis				
Station	Peak	Reverse	Off Peak	Weekend
Minority serving	82.55%	93.07%	92.69%	95.31%
Non-Minority serving	82.55%	93.07%	92.69%	95.31%
New Canaan Branch Line OTP				
Station	Peak	Reverse	Off Peak	Weekend
New Canaan	82.55%	93.07%	92.69%	95.31%
Talmadge Hill	82.55%	93.07%	92.69%	95.31%
Springdale	82.55%	93.07%	92.69%	95.31%
Glenbrook	82.55%	93.07%	92.69%	95.31%

New Canaan Branch Line trains stop at every station. This keeps the rail on time percentage the same

for every station on the line. All OTP percentages are the same regardless of classification, therefore there is no finding of disparate impacts for OTP on the New Canaan branch line.

Table 39: Danbury Branch Comparison

Danbury Branch Line OTP Analysis				
Station	Peak	Reverse	Off Peak	Weekend
Minority serving	89.34%	96.14%	89.60%	96.89%
Non-Minority serving	89.34%	96.14%	89.60%	96.89%
Danbury Branch Line OTP				
Station	Peak	Reverse	Off Peak	Weekend
Danbury	89.34%	96.14%	89.60%	96.89%
Bethel	89.34%	96.14%	89.60%	96.89%
Redding	89.34%	96.14%	89.60%	96.89%
Branchville	89.34%	96.14%	89.60%	96.89%
Cannondale	89.34%	96.14%	89.60%	96.89%
Wilton	89.34%	96.14%	89.60%	96.89%
Merritt 7	89.34%	96.14%	89.60%	96.89%

Danbury Branch Line trains stop at every station. This keeps the rail on time percentage the same for every station on the line. All OTP percentages are the same regardless of classification, therefore there is no finding of disparate impacts for OTP on the Danbury branch line.

Table 40: Waterbury Branch Comparison

Waterbury Branch Line OTP Analysis				
Station	Peak	Reverse	Off Peak	Weekend
Minority serving	91.09%	94.28%	88.60%	93.31%
Non-Minority serving	91.09%	94.28%	88.60%	93.31%
Waterbury Branch Line OTP				
Station	Peak	Reverse	Off Peak	Weekend
Waterbury	91.09%	94.28%	88.60%	93.31%
Naugatuck	91.09%	94.28%	88.60%	93.31%
Beacon Falls	91.09%	94.28%	88.60%	93.31%
Branchville	91.09%	94.28%	88.60%	93.31%
Seymour	91.09%	94.28%	88.60%	93.31%
Ansonia	91.09%	94.28%	88.60%	93.31%
Derby-Shelton	91.09%	94.28%	88.60%	93.31%

Waterbury Branch Line trains stop at every station. This keeps the rail on time percentage the same for every station on the line. All OTP percentages are the same regardless of classification, therefore there is no finding of disparate impacts for OTP on the Danbury branch line.

Shore Line East OTP

Shore Line East operates service between New London and New Haven. This line is divided into two segments, New London to Old Saybrook and Old Saybrook to New Haven. New Haven State Street is included in the Shore Line East Analysis. New London is the only station on the New London to Old Saybrook segment.

Table 41: Shore Line East OTP Analysis and OTP by Station

Shore Line East OTP Analysis				
Station	Peak	Reverse	Off-peak	Weekend
Minority serving stations	90.23%	86.86%	89.95%	88.18%
Non-minority serving stations	90.78%	87.24%	91.36%	88.59%
Shore Line East OTP by Station				
Station	Peak	Reverse	Off-peak	Weekend
New London	89.13%	86.11%	87.13%	87.37%
Old Saybrook	90.78%	87.24%	91.36%	88.59%
Westbrook	90.78%	87.24%	91.36%	88.59%
Clinton	90.78%	87.24%	91.36%	88.59%
Madison	90.78%	87.24%	91.36%	88.59%
Guilford	90.78%	87.24%	91.36%	88.59%
Branford	90.78%	87.24%	91.36%	88.59%
New Haven State Street	90.78%	87.24%	91.36%	88.59%
New Haven Union Station	90.78%	87.24%	91.36%	88.59%

The New London extension of Shore Line East gets limited service but every train that travels through to and from New London stops at every station. New London is a minority serving station and this does impact the OTP for minority serving stations. OTP for minority serving stations are lower for every service period than non-minority serving stations, but the differences are all below the 15% disparate impact threshold.

Load Factor

The load factor standard is based on the percentage of passengers-to-vehicle seat capacity given the time period, as shown in Table 42. This load factor policy is the same for the entire passenger rail system, but is equipment constrained. Please note that the same train equipment consist operates several different trains over the course of a single day. It is not practical to break up a consist between train runs.

Table 42: Load Factor Service Standard

Time Period	Lengthening Trains If Occupancy Exceeds...	Shortening Trains If Occupancy (after reduction) Would Not Exceed...
AM Peak, PM Peak, Reverse Peak	95%	95%
Off-Peak Weekday	85%	85%

Weekend	75%	75%
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New Haven Line Load Factor

Most New Haven Line trains have the maximum occupancy as the train arrives or departs from Grand Central Terminal in New York.

Table 43: Inner New Haven Line Load Factor Comparison

Inner NHL Stations	Peak	Rev Peak	Off-Peak	Weekend
Minority serving	84.01%	42.83%	41.68%	39.17%
Non-minority serving	84.37%	40.11%	43.97%	38.07%

The Inner New Haven Line has minority serving stations averaging lower load factors than non-minority serving stations during peak and weekend service. The Inner New Haven Line has non-minority serving stations averaging lower load factors during reverse peak service and off-peak service. The difference between the minority serving stations and non-minority serving stations is less than 3%. This is well below the 15% disparate impact threshold.

Table 44: Outer New Haven Line Load Factor Comparison

Outer NHL Stations	Peak	Rev Peak	Off-Peak	Weekend
Minority serving	82.29%	45.62%	40.35%	45.58%
Non-minority serving	83.43%	45.38%	40.10%	46.38%

The Outer New Haven Line has minority serving stations averaging lower load factors than non-minority serving stations during peak service and weekend service. The Outer New Haven Line has non-minority serving stations averaging lower load factors during reverse peak service and off-peak service. The greatest difference between the minority serving stations and non-minority serving stations is less than 1%. This is below the 15% disparate impact threshold. Table 45 reports the average load factor for trains stopping at the New Haven Line stations.

Table 45: Average Load Factor of trains serving New Haven Line stations

Station	Peak	Reverse	Off Peak	Weekend
New Haven State Street	N/A	N/A	N/A	N/A
New Haven Union Station	82.62%	46.56%	40.19%	46.75%
West Haven	82.62%	46.56%	40.19%	46.75%
Milford	82.62%	46.56%	40.19%	46.75%

Stratford	82.62%	46.56%	40.19%	46.75%
Bridgeport	82.90%	46.56%	40.82%	46.75%
Fairfield Metro	83.14%	46.56%	40.82%	46.75%
Fairfield	83.14%	46.56%	40.82%	46.75%
Southport	84.39%	42.75%	39.98%	46.01%
Green's Farms	84.39%	45.67%	39.98%	46.01%
Westport	82.39%	46.56%	40.24%	46.75%
East Norwalk	84.32%	42.75%	39.98%	46.01%
South Norwalk	81.23%	46.56%	40.44%	46.75%
Rowayton	80.54%	45.67%	38.27%	46.01%
Darien	79.71%	46.56%	39.06%	46.75%
Noroton Heights	79.56%	46.56%	40.37%	46.01%
Stamford	82.92%	42.75%	41.76%	42.44%
Old Greenwich	84.37%	42.86%	41.65%	38.07%
Riverside	84.37%	42.86%	41.65%	38.07%
Cos Cob	84.37%	42.86%	41.65%	38.07%
Greenwich	85.93%	40.11%	43.97%	38.07%

Table 46: New Canaan Branch Line Load Factor Comparison

New Canaan Stations	Peak	Rev Peak	Off-Peak	Weekend
Minority serving	77.83%	57.33%	6.39%	4.45%
Non-minority serving	77.83%	57.33%	6.39%	4.45%

New Canaan Branch Line trains stop at every station. This keeps the maximum load factor passengers experience on board a train the same for every station on the line. There is no finding of disparate impact for load factor on the New Canaan branch line.

Table 47: Danbury Branch Line Load Factor Comparison

Danbury Branch Stations	Peak	Rev Peak	Off-Peak	Weekend
Minority serving	52.43%	8.67%	10.00%	10.92%
Non-minority serving	52.43%	8.67%	10.00%	10.92%

Danbury Branch Line trains stop at every station. This keeps the maximum load factor passengers experience on board a train the same for every station on the line. There is no finding of disparate impact for load factor on the Danbury branch line.

Table 48: Waterbury Branch Line Load Factor Comparison

Waterbury Branch Stations	Peak	Rev Peak	Off-Peak	Weekend
Minority serving	30.50%	12.33%	14.25%	21.47%
Non-minority serving	30.50%	12.33%	14.25%	21.47%

Waterbury Branch Line trains stop at every station. This keeps the maximum load factor passengers experience on board a train the same for every station on the Line. There is no finding of disparate impact for load factor on the Waterbury branch line.

Shore Line East Load Factor

Table 49: Shore Line East Load Factor Comparison

Shore Line East Load Factor Analysis				
Station	Peak	Reverse	Off-Peak	Weekend
Minority serving stations	20.67%	7.47%	12.26%	10.16%
Non-minority serving stations	19.63%	6.50%	13.02%	9.88%
Shore Line East Load factor by Station				
Station	Peak	Reverse	Off-Peak	Weekend
New London	22.76%	9.40%	10.73%	10.71%
Old Saybrook	19.63%	6.50%	13.02%	9.88%
Westbrook	19.63%	6.50%	13.02%	9.88%
Clinton	19.63%	6.50%	13.02%	9.88%
Madison	19.63%	6.50%	13.02%	9.88%
Guilford	19.63%	6.50%	13.02%	9.88%
Branford	19.63%	6.50%	13.02%	9.88%
New Haven State Street	19.63%	6.50%	13.02%	9.88%
New Haven Union Station	19.63%	6.50%	13.02%	9.88%

New London Station is an eastward extension of the original Shore Line East service between New Haven and Old Saybrook. Approximately two-thirds of the trains extend beyond Old Saybrook through, to, and from New London. New London is a minority serving station and it is compared to the non-minority serving Shore Line East stations. New London station trains have a lower peak period and reverse peak period load factor than SLE non-minority serving stations. New London station trains have a higher reverse peak period and off-peak period load factor than non-minority serving stations. The highest differential in load factor is 3.1% which is well below the disparate impact threshold. There is no disparate impact on the Shore Line East load factors.

Vehicle Assignment Policy

Vehicles are assigned to trains based on required propulsion power (diesel or electric) for the line, individual train ridership and seating capacity, and maintenance and storage yard requirements.

Table 50: Average Vehicle Age

<i>Equipment Type</i>	<i>Book Count</i>	<i>Average Age</i>	<i>Unit Size</i>	<i>Unit Seating</i>
M-8 EMU (NHL)	275	10	PAIR	A&B UNIT – 110/101
ELECTRIC COACHES	275			
Bombardier Push/Pull Coach (NHL)	20	33	COACH	Cab 113, Tr. 131
Bombardier Push/Pull Coach (NHL)	20	29	COACH	Cab 113, Tr. 131
Bombardier Push/Pull Center Door Coach (NHL)	8	17	COACH	Cab 99, Trailer 115 Trailer w/ toilet 103
Mafersa Push/Pull Coach (SLE)	33	22.5	COACH	Cab 100, Tr. 109
PUSH-PULL COACHES	81			
TOTAL PASSENGER VEHICLES	356			
<i>Equipment Type</i>	<i>Book Count</i>	<i>Average Age</i>	<i>Year Rebuilt</i>	
GP-40-2H Locomotive (SLE)	6	48	2018 top deck	
P-32AC-DM Locomotive (NHL/Branch)	4	18	N/A	
P-40 Locomotive (SLE)	8	27	In process	
P-40 Locomotive (SLE – ex-NJT)	4	27	In process	

Vehicle Age and Assignment

The New Haven Line operates mainline service with electric multiple-unit (EMU) cars operating under catenary. The New Haven Line also has three branch lines – the New Canaan Branch Line which is also an electric fleet and the Danbury and Waterbury branch lines which operate diesel locomotive and push/pull passenger coaches. The primary criterion in assigning transit vehicles is the type of propulsion power required for a particular branch or line segment. Diesel locomotive-hauled coaches are used on non-electrified territory including the Danbury Branch and Waterbury Branch on MNR and on Shore Line East.

The EMU vehicles are used on electrified territory (all remaining lines/branches). Where a train operates over electrified and non-electrified territory, diesel locomotive hauled coaches must be assigned.

Cars are not assigned to specific routes or branches within electric or diesel territory but are cycled from line/branch to line/branch to achieve optimum car utilization efficiency. Short-term rolling stock assignment plans are developed for deployment of railcars. Vehicles are assigned to trains based on the required propulsion power (diesel or electric) for the route, individual train ridership and seating capacity, and maintenance and storage yard requirements, not age. CTDOT has ordered sixty-six (66) M8 EMUs at a cost of \$3.8 million per unit and is expecting delivery in the Fall of 2020. Mainline trains all

serve the same service area, there is no difference in the quality of the railcar that is dispatched for any given train consist.

Shore Line East operates a diesel fleet and push-pull passenger coaches of similarly aged equipment on a single line. Since all trains serve largely the same service area, there is no opportunity for dispatching substantially differently aged equipment to serve any population segment. Given the different operating environments of the two different rail services, the equipment is generally not interchangeable.

The following vehicles are assigned by service as follows:

- M-8 EMU: operate on the New Haven Main Line and the New Canaan Branch Line.
- Bombardier Push/Pull Coaches: Operate on the Danbury Branch and Waterbury Branch line with limited Main Line use.
- P-32AC-DM Diesel Locomotives: Operate on the Danbury Branch and Waterbury Branch Lines with limited Main Line use.
- BL20-GH Diesel Locomotives: Operate on the Danbury Branch and Waterbury Branch Lines with limited Main Line use.
- Mafersa Push/Pull coaches: Operate on the Shore Line East and have limited operation on the New Haven Main Line.
- GP-40-2H Diesel Locomotives: Operate on the Shore Line East and have limited operation on the New Haven Main Line.
- P-40 Diesel Locomotives: Operate on the Shore Line East and have limited operation on the New Haven Main Line, routes or branches within electric or diesel territory but are cycled from line/branch to line/branch to achieve optimum car utilization efficiency.

A copy of the monitoring report resolution signed by Commissioner Joseph Giulietti can be found on page 282 of the CTDOT FTA Title VI Program Appendix.

Bus Amenities Analysis

Transit amenities are described in FTA Circular 4702.1B as items of comfort, convenience, and safety that are available to the general riding public. Transit amenities may include shelters, benches, trash receptacles, and other bus stop or rapid transit station amenities such as electronic message signs.

With the exception of a few bus shelters in the Hartford Division, CTDOT and CT*transit* do not own or maintain any of the on-street bus shelters along bus routes. CTDOT does install and maintain shelters at park and ride lots and maintains bus stop signage on state roads and U.S.-numbered highways throughout the state. The decision to install a shelter at a local bus stop is at the discretion of local municipalities. CT*transit* works with regional agencies and individual towns to encourage shelter installations that meet policy guidelines and to encourage that shelters are cleaned and maintained, including snow removal, on a regular basis, however, it is ultimately the responsibility of the host municipality to maintain the shelters.

CTDOT policy states that shelters are considered for installation based on the criteria detailed in the CT*transit* Service Standards guide:

Table 51: Bus Shelter Priority Guide

Daily Customer Boardings	Headway		
	<10 minutes	10-29 minutes	30 minutes or more
300 or more	2	1	1
200-299	3	2	1
100-199	4	3	2
50-99	4	3	2
25-49	4	4	3

The priority guide generally supports the following:

- Stops served by routes with longer headways have priority over stops with shorter headways in order to provide protection for those customers with potentially longer wait times
- Stops with more activity have priority over stops with less activity, with all other factors being equal, in order to provide protection to a larger number of customers.

Benches: CTDOT does not place benches at bus stops but does have such them at all fixed-guideway stops including CTfastrak stations and railstations.

CTDOT conducted an amenities analysis to identify if there are disparate impacts in the distribution of shelters or seating along the transit system. The analysis was conducted by identifying the total number of stops with each amenity then calculating the percentage of the total that were located at stops classified as minority serving, and those classified as non-minority serving. If the percent non-minority was fifteen percent (15%) higher, this would constitute a disparate impact. Minority stops are stops that have their service buffer (1/4 mile for local service and 2 ½ miles for express service) intersect census tracts with a percent minority population that is greater than the statewide average of 33.323%. Table 52 presents the results of the analysis.

Table 52: Bus Amenities Analysis Results

	Number of Stops with a Shelter	Number of Stops with Seating (i.e. benches, seats at stops/station)
All Stops with Amenity	44	38
Percent Minority	63.64%	63.16%
Percent Non-Minority	36.36%	36.84%
Disparate Impact (Y/N)	N	N

CTDOT developed local and express maps presenting the distribution of shelters and seating, along with a layer identifying minority census tracts. These maps can be found on pages 5-6 of the CTDOT FTA Title VI Map Appendix.

There were no disparate impacts in the distribution of shelters and seating along the transit system.

Rail Amenities Analysis

Amenities at train stations can include platform shelters, recycling/trash bins, visual information displays, escalators, elevators, platform canopies, route maps, and system maps. Station amenities are sited based on a station's annual ridership, the length of the platform, and the size of station. The siting of some amenities is also based on the property owner and the property's physical attributes, such as the presence of an up and over walk bridge.

The rail amenities on each line were analyzed by comparing the ratio of minority stations containing the amenity to the ratio of non-minority stations containing the amenity.

Shore Line East

Shore Line East (SLE) stations include: New London, Old Saybrook, Westbrook, Clinton, Madison, Guilford, Branford, New Haven State Street, and New Haven Union station. Of the nine stations along Shore Line East, 67% are non-minority serving stations and 33% are minority serving stations.

Table 53: Shore Line East Amenities Analysis

Amenity	Percent Minority Stations with Amenity	Percent Non-Minority Stations with Amenity	Disparate Impact (Y/N)
Escalator	33.33%	0%	N
Elevator	66.7%	66.7%	N
Waste and Recycling	100%	0%	N
Printed Signs	100%	100%	N
System Maps	66.7%	0%	N
Route Maps	66.7%	0%	N
Schedules	100%	100%	N
Electronic Signage	100%	0%	N
Rail Platform Canopies	100%	100%	N
Rail Shelters	0%	0%	N
Seating	100%	100%	N

New London, Clinton, and Madison stations do not have up and over walk bridges. Only New Haven Union Station, a minority serving station has an escalator. Most SLE stations have elevators except New London, Clinton and Madison. New London is a minority serving station while Clinton and Madison are non-minority serving stations. The absence of the elevator is strictly infrastructure driven. Elevators are required at every station with an up and over to comply with the Americans with Disabilities Act (ADA) but are not required at stations without an up and over.

All SLE stations have trash receptacles but none have recycling bins, except New Haven Union station and New Haven State Street (both minority serving stations) which have both; these stations are technically Metro North stations.

All SLE stations have printed signs and schedules, but only New Haven State Street and New Haven Union stations which are both minority serving, have system and route maps.

Only New Haven State Street and New Haven Union stations have electronic signs. All other SLE stations use the Amtrak TAMS (Train Alert Messaging System) which is an audio only messaging system. CTDOT

plans to install a PIDS (Passenger Information Display System) in 2021, which will include electronic signs.

There are no disparate impacts in the distribution of amenities on Shore Line East.

New Haven Line

New Haven mainline stations are; New Haven State Street, New Haven Union station, West Haven, Milford, Stratford, Bridgeport, Fairfield Metro, Fairfield, Southport, Green's Farms, Westport, East Norwalk, South Norwalk, Rowayton, Darien, Noroton Heights, Stamford, Old Greenwich, Riverside, Cos Cob and Greenwich.

Out of the twenty-one (21) stations along the New Haven Line, 76.2% are minority serving stations and 23.8% are non-minority serving stations.

Table 54: New Haven Line Amenities Analysis

Amenity	Percent Minority Stations with Amenity	Percent Non-Minority Stations with Amenity	Disparate Impact (Y/N)
Escalator	12.5%	0%	N
Elevator	56.3%	20%	N
Waste and Recycling	100%	100%	N
Printed Signs	100%	100%	N
System Maps	12.5%	0%	N
Route Maps	12.5%	0%	N
Schedules	100%	100%	N
Electronic Signage	81.3%	80%	N
Rail Platform Canopies	100%	100%	N
Rail Shelters	75%	60%	N
Seating	100%	100%	N

New Haven Union and Stamford, both minority serving stations are the only stations with escalators. Along the mainline, ten (10) stations have elevators; nine (9) are minority serving stations and one (1) is a non-minority serving station.

All NHL mainline stations have trash receptacles, recycling bins, printed signs, schedules, seating, and rail canopies. Only New Haven State Street and New Haven Union stations, both minority serving, have system and route maps.

81.3% of minority serving and 80% of non-minority serving stations have electronic signs. The Inner New Haven Line stations of Old Greenwich, Riverside, Cos Cob, and Greenwich do not have electronic signs.

New Haven State Street, New Haven Union, Milford, Bridgeport, Darien and Greenwich stations do not have rail shelters. This is a ratio of 75% minority serving stations to 60% non-minority serving stations.

There are no disparate impacts in the distribution of amenities on the New Haven mainline.

New Haven Line (NHL) Branch Lines

New Haven Branch Line stations are; New Canaan, Talmadge Hill, Springdale, Glenbrook, (New Canaan Branch). Danbury, Bethel, Redding, Branchville, Cannondale, Wilton and Merritt 7 (Danbury Branch).

Waterbury, Naugatuck, Beacon Falls, Seymour, Ansonia and Derby-Shelton (Waterbury Branch). Of the stations along the New Haven Line Branch Lines 64.7% are non-minority serving stations and 35.3% are minority serving stations.

Table 55: New Haven Branch Lines Amenity Analysis

Amenity	Percent Minority Stations with Amenity	Percent Non-Minority Stations with Amenity	Disparate Impact (Y/N)
Escalator	0%	0%	N
Elevator	0%	0%	N
Waste and Recycling	100%	100%	N
Printed Signs	100%	100%	N
System Maps	0%	0%	N
Route Maps	0%	0%	N
Schedules	100%	100%	N
Electronic Signage	33.3%	9.1%	N
Rail Platform Canopies	83.3%	63.6%	N
Rail Shelters	66.7%	63.6%	N
Seating	100%	100%	N

None of the NHL Branch Line stations have an escalator, elevator, or system and route maps. All NHL Branch Line stations have trash receptacles and recycling bins, printed signs, seating, and schedules.

Twelve (12) NHL Branch Line stations have rail canopies, including 83.3% of minority serving stations and 63.6% of non-minority serving stations. Ten (10) NHL Branch line stations have rail shelters, including 66.7% of minority serving stations and 63.6% of non-minority serving stations.

Refer to page 7 of the CTDOT FTA Title VI Map Appendix for a map illustrating rail amenities. There are no disparate impacts in the distribution of amenities for NHL Branch Line stations.

Bus and Rail Service Availability

Bus Service Availability Standard

The Service Availability Standard is that the Connecticut Department of Transportation (CTDOT) will distribute transit service so that the majority of residents in the service area are within 1/4 mile of local weekday transit service, 1/2 mile of local weekend transit service, and 2 ^{1/2} miles of park and ride stops.

Rail Service Availability Standard

The Rail Service Availability Standard is that the Connecticut Department of Transportation (CTDOT) will distribute rail service so that a majority of residents in the service area are within 2 ^{1/2} miles of rail service.

Disparate Impact Analysis

Disparate impact is determined based on the number of minority and non-minority residents in the total service area compared to the number of minority and non-minority residents in the transit buffer. If the

percentage of all minority residents in the transit buffer is less than the percentage of all non-minority residents in the transit buffer by more than 15 percent, this signifies a disparate impact.

Methodology

In order to perform the transit service availability analysis, General Transit Feed Specification (GTFS) was used to identify which stops had trips on which days of the week in the Hartford and New Haven Divisions. Similarly, GTFS was used to perform the rail service availability.

Determining Service Area

Buffers were created around stops depending on the days the stops were visited and whether the stop was a local stop or a park and ride. Buffer distances are detailed in Table 56. Any tracts that touched these buffers were considered to be in the service area, whether they fell completely inside the buffer or not.

Table 56: Buffer Distances

Local Weekday Service	0.25 Miles
Local Weekend Service	0.50 Miles
Park & Ride Stops (Weekday & Weekend)	2.5 Miles
Rail Service	2.5 Miles

Determining the Transit Buffer

The total number of residents within the transit buffer was calculated by weighting the census population data of each tract by how much of the tract area fell inside the walking buffer. The percent of residents in the transit buffer is calculated by dividing the number of residents in the transit buffer by the number of residents in the total service area.

Demographic Evaluation

Census tract demographic data for minority status came from the 2017 5-year ACS data table B03002. First the total residents and percentage of minority residents were determined for the entire service area; then the total residents and percentage of minority and non-minority residents within the transit buffer was calculated. Monitoring results are detailed in Tables 57 and 58.

Table 57: Transit Monitoring Results

Service	Percent of service area population in the transit buffer	Service Standard Met (Y/N)	Percent of all minorities in the service area that meet the service standard	Percent of all non-minorities in the service area that meet the service standard	Disparate Impact (Y/N)
Hartford Weekday	69.3%	Y	80.5%	63.7%	N
Hartford Saturday	64.3%	Y	78.8%	54.9%	N

Hartford Sunday	61.6%	Y	75.9%	51.9%	N
New Haven Weekday	53%	Y	65%	45.3%	N
New Haven Saturday	57.7%	Y	71%	49.3%	N
New Haven Sunday	62.6%	Y	74%	52.3%	N

Table 58: Rail Monitoring Results

Service	Percent of service area population in the transit buffer	Service Standard Met (Y/N)	Percent of all minorities in the service area that meet the service standard	Percent of all non- minorities in the service area that meet the service standard	Disparate Impact (Y/N)
Metro- North	80.3%	Y	86.6%	75.4%	N
Shore Line East	64.3%	Y	73.7%	57.4%	N

In the Hartford Division, some tracts in cities which are served by a Hartford Division bus route show poor coverage, such as in New Britain. However, these residents are served by local service within their community that does not appear in the analysis of the Hartford Division.

In the New Haven Division, some tracts in cities which are served by a New Haven Division bus route show poor coverage, such as in Waterbury. These residents are served by local service within their community that does not appear in the analysis of the New Haven Division. Maps illustrating service availability for the Hartford and New Haven Divisions can be found on pages 8-21 of the CTDOT FTA Title VI Map Appendix.

Demographic and Service Profile Maps

49 CFR Section 21.9(b) requires transit providers to collect and analyze racial and ethnic data showing the extent to which members of minority groups are beneficiaries of programs receiving Federal financial assistance. Service area maps of CTDOT's public transportation system were created and include transit service areas, transit facilities, fixed guideway alignment, and transit stations.

The maps overlay Census demographic data and highlight tracts where the percentage of the total minority population residing in the tract exceeds the average percentage of the minority population for the service area as a whole. Additionally, service area maps identify where the percent of low-income population residing in a given census tract exceeds the average percentage of low-income populations for the service area as a whole. Maps identifying Limited English Proficient (LEP) populations were also

developed for each service area. Maps are used to identify and analyze impacts to Title VI and low-income communities, and to insure that needs of LEP populations are considered and addressed.

The rail system maps were developed by first adding various base layers including geographic boundaries, major traffic generators, and highway system information. Rail stations were then added, and a 2 ½ mile buffer was applied around each station to create a rail service area.

The bus system maps were developed using the same first layer as the rail maps and then various buffers were added depending on the type of route. Local bus routes were mapped with a quarter (1/4) mile buffer around the route, while a 2 ½ mile buffer was established around express bus stops. Rural transit districts with deviated fixed route service were mapped with a three-quarter (3/4) mile buffer around the route; all other routes within the transit districts were mapped with a quarter mile buffer.

Elderly/Disabled Dial-A-Ride services, provided by rural transit districts, were mapped separately. In these maps, the service area is determined by the towns served. Similarly, 5310 vehicle grants were mapped using a statewide map and the service area is determined by towns served.

Demographic and socio-economic data layers were developed using 2013-2017 American Community Survey (ACS) data. The data was used to identify statewide and service-area based Limited English Proficiency (LEP) populations, minority populations, and low-income populations.

Service area, low income, minority and LEP maps for all CTDOT transit and rail service areas can be found on pages 22-87 of the CTDOT FTA Title VI Map Appendix.

Additionally, statewide minority, low income, and LEP maps can be found on pages 88-90 of the CTDOT FTA Title VI Map Appendix.

Surveys and Demographic Profile

Bus and rail surveys were conducted during the reporting period to identify demographic information of bus and rail riders, as well as travel patterns. Below is a listing of the surveys conducted during the reporting period. Copies of the survey reports can be found on pages 283-630 of the CTDOT FTA Title VI Program Appendix.

Surveys

- Shore Line East 2017 Passenger Study
- Shore Line East 2019 Passenger Study
- Metro-North 2017 Customer Satisfaction Survey
- Metro-North 2018 Customer Satisfaction Survey
- Metro-North 2019 Customer Satisfaction Survey
- CTtransit New Haven Division 2019 Customer Satisfaction Survey
- I-84 Hartford Rider On-Board Survey

Demographic Profile

The FTA circular requires CTDOT to develop a demographic profile comparing minority riders and non-minority riders, including a comparison of trips taken and fare usage of minority riders vs. non-minority riders. To collect this data, CTDOT incorporates demographic questions into its surveys. A profile, by

service type, is provided below. These profiles were generated from survey data collected through the administration of the surveys noted above.

New Haven Rail Line

The New Haven rail line (NHL) service area includes the New Haven Main line, and the New Canaan, Danbury, and Waterbury Branch Lines. Metro North Rail (MNR) operates all lines seven days a week. The lines on the map extend from New Haven Union Station to the Connecticut/New York border near Greenwich, as well as the station stops for the branch lines that extend to New Canaan, Danbury, and Waterbury.

A map of the service area by minority population can be found on page 25 of the CTDOT FTA Title VI Map Appendix

New Haven Line system ridership distribution by race from the 2019 Customer Satisfaction Survey conducted by MNR is provided in Table 59, and ridership distribution by income from the same survey is provided in Table 60.

Table 59: NHL Ridership by Race

Race	Percentage of Ridership
American Indian or Alaska Native	0.6%
Asian	6.4%
Black or African American	7.2%
Hispanic/Latino	2.4%
Middle Eastern	0.0%
Multi-Racial/Mixed	0.6%
Native Hawaiian and Other Pacific Islanders	0.4%
Other	2.0%
White	80.4%

Table 60: NHL Ridership by Income

Income Category	Percentage of Ridership
Under \$12,500	2.4%
\$12,500 - \$24,999	2.1%
\$25,000 - \$37,499	3.3%
\$37,500 - \$49,999	4.2%
\$50,000 - \$74,999	9.6%
\$75,000 - \$99,999	9.3%
\$100,000 - \$149,999	13.8%
\$150,000 - \$199,999	11.3%
\$200,000 - \$299,999	13.7%
More than \$300,000	30.3%

Tables 61 and 62 provide data related to fare usage on the New Haven Line. Table 61 provides ridership fare purchase distribution by media type and Table 62 provides fare usage for minority vs. non-minority riders.

Table 61: NHL Ridership Fare Distribution by Media Type

Media Type	Ridership Distribution
Monthly	48.5%
Weekly	2.5%
10-Trip	10.8%
One Way	13.3%
Round Trip	18.9%
Senior/Disabled Person/Medicare Recipients	5.3%
Uniticket (MNR & Bus)	0.5%
Uniticket (MNR & SLE)	0.1%
Uniticket (MNR & HL)	0.1%
Other	0.0%

Table 62: NHL Fare Usage by Minority Vs. Non-Minority

Media Type	Non-minority	Minority
Monthly	80.93%	19.07%
Weekly	93.21%	6.79%
Ten Trip	67.39%	32.61%
One way	88.41%	11.59%
Round Trip	69.85%	30.15%
Seniors/Disabled Persons/Medicare Recipients	80.05%	19.95%
Uniticket (Combined Metro-North & Bus Ticket)	88.18%	11.82%
Uniticket (Combined Metro-North & Shore Line East Ticket)	72.73%	27.27%
Uniticket (Combined Metro-North & Hartford Line Ticket)	100.00%	0.00%

Shore Line East

The Shore Line East (SLE) Rail line service area map includes the Shore Line East commuter rail service between New London and New Haven. Amtrak operates Shore Line East for CTDOT seven days a week. The map shows the Shore Line East line which runs from New Haven to New London, and includes the defined service areas based on a 2.5 mile radius buffer around the rail stations of New Haven – Union, New Haven – State Street, Branford, Guilford, Madison, Clinton, Westbrook, Old Saybrook, and New London.

A map of the service area by minority population can be found on page 29 of the CTDOT FTA Title VI Map Appendix

Shore Line East ridership distribution by race from the 2019 Customer Satisfaction Survey conducted by CTrides is provided in Table 63 and ridership distribution by income from the same survey is provided in Table 64.

Table 63: SLE Ridership by Race

Race	Percentage of Ridership
American Indian or Alaska Native	0.3%
Asian	5.1%
Black or African American	4.5%
Hispanic/Latino	5.8%
Native Hawaiian and Other Pacific Islanders	0.2%
Other	2.4%
Subcontinent Asian	0.9%
White	80.6%

Table 64: SLE Ridership by Income

Income Category	Percentage of Ridership
Under \$12,500	6.1%
\$12,500 - \$24,999	4.4%
\$25,000 - \$37,499	6.3%
\$37,500 - \$49,999	6.3%
\$50,000 - \$74,999	12.8%
\$75,000 - \$99,999	16.3%
\$100,000 - \$149,999	21.1%
\$150,000 - \$199,999	10.7%
\$200,000 - \$299,999	8.4%
More than \$300,000	7.7%

Tables 65 and 66 provide data related to fare usage on Shore Line East. Table 65 provides ridership fare purchase distribution by media type and Table 66 provides fare usage for minority vs. non-minority riders.

Table 65: SLE Fare usage

Fare Type	Percentage of All Fare Types
Shore Line East Regular ticket (one way)	38.38%
Shore Line East Senior/Disabled one-way ticket	9.76%
UniRail One Way ticket (combined Shore Line East/New Haven Line ticket)	1.01%
Ten Trip Ticket	8.92%
Senior/Disabled Ten Trip Ticket	2.53%
Monthly pass (does not include New Haven Commuter Connection bus service)	25.93%
Monthly Plus (includes New Haven Commuter Connection bus service)	5.39%
UniRail monthly (combined Shore Line East/New Haven Line monthly ticket)	6.40%
Other	1.68%

Table 66. SLE Fare Type for Minority vs. Non-Minority

Fare Type	Non-Minority	Minority
Shore Line East Regular ticket (one way)	77.45%	22.55%
Shore Line East Senior/Disabled one way ticket	87.76%	12.24%
UniRail One Way ticket (combined Shore Line East/New Haven Line ticket)	66.67%	33.33%
Ten Trip Ticket	89.13%	10.87%
Senior/Disabled Ten Trip Ticket	92.31%	7.69%
Monthly pass (does not include New Haven Commuter Connection bus service)	86.86%	13.14%
Monthly Plus (includes New Haven Commuter Connection bus service)	92.86%	7.14%
UniRail monthly (combined Shore Line East/New Haven Line monthly ticket)	91.18%	8.82%

CTtransit New Haven Division

The New Haven Division operates 14 local routes, connecting with bus services in Meriden, Wallingford, Milford, and the lower Naugatuck Valley areas, as well as with the New Haven Line and Shore Line East rail services. In 2019, H.N.S Management (referred to hereafter as CTtransit) conducted a customer satisfaction survey for the New Haven Division.

A map of the New Haven Division service area by minority population can be found on page 53 of the CTDOT FTA Title VI Map Appendix.

CTtransit New Haven Division race demographics from the 2019 Customer Satisfaction Survey conducted by CTtransit are provided in Tables 67 and 68; and ridership distribution by income from the same survey is provided in Table 69.

Table 67: New Haven Division Ridership: Hispanic Origin

	Hispanic Origin?
Yes	24%
No	76%

Table 68: New Haven Division Ridership by Race

Race	Percentage of Ridership
American Indian or Alaska Native	1.7%
Asian	3.6%
Black or African American	56.9%
Native Hawaiian and Other Pacific Islanders	0.9%
White	28.6%
Two or more of these Races	8.3%

Table 69: New Haven Ridership by Income

Income Category	Percentage of Ridership
Under \$12,000	22%
\$12,001 - \$16,000	12%
\$16,001 - \$20,500	10%
\$20,501 - \$25,000	8%
\$25,001 - \$29,000	7%
\$29,001 - \$33,500	5%
\$33,501 - \$38,000	4%
\$38,001 – \$42,000	4%
More than \$42,000	9%
Don't know	20%

Tables 70 and 71 provide data related to fare usage in the New Haven Division. Table 70 provides ridership fare purchase distribution by media type and Table 71 provides fare usage for minority vs. non-minority riders.

Table 70: New Haven Division Ridership Fare Distribution by Media Type

Fare Media Type	Percentage of Ridership
All-Day Pass	17%
2 Hour Pass	11%
31 Day Pass	22%
3, 5- and 7-Day Pass	3%
10 Ride Ticket	10%
GoCT Card	5%
U Pass (Student discount)	9%
Single Fare	19%
Other	5%

Table 71: New Haven Division Fare Usage by Minority Vs. Non-Minority

Fare Media Type	Percentage of Usage for Minority Riders	Percentage of Usage for Non-Minority Riders
All-Day Pass	19%	12%
2 Hour Pass	10%	8%
31 Day Pass	22%	25%
3, 5- and 7-Day Pass	3%	2%
10 Ride Ticket	8%	16%
GoCT Card	5%	9%
U Pass (Student discount)	9%	6%
Single Fare	18%	18%
Other	5%	3%

I-84 Hartford On-Board Survey

In 2016, as part of the “Let’s Go CT!” plan and the upcoming I-84 Viaduct Reconstruction Project, the CTDOT conducted an onboard and at-stop survey to solicit input from Hartford area transit riders and determine who rides the bus and how riders use local transit. Over the course of two months, about 49,000 Hartford area transit riders were surveyed.

Hartford ridership distribution by race from the 2016 On-Board Survey is provided in Table 72 and ridership distribution by income from the same survey is provided in Table 73.

Table 72: Hartford Ridership by Race

Race	Percentage of Ridership
African American	41%
Hispanic	27%
White	25%
Other	7%

Table 73: Hartford Ridership by Income

Income Category	Percentage of Ridership
Under \$5,000	6.43%
\$5,000 - \$9,999	4.16%
\$10,000 - \$14,999	5.51%
\$15,000 - \$19,999	7.07%
\$20,000 - \$24,999	9.92%
\$25,000 - \$29,999	9.58%
\$30,000 - \$34,999	11.24%
\$35,000 – \$39,999	10.30%
\$40,000 - \$49,000	7.96%
\$50,000 - \$59,000	6.30%
\$60,000 - \$74,999	5.44%
\$75,000 - \$99,999	3.39%
More than \$100,000	3.32%
Don’t know/No answer	9.39%

Tables 74 and 75 provide data related to fare usage for Hartford transit users. Table 74 provides ridership fare purchase distribution by media type and Table 75 provides fare usage for minority vs. non-minority riders.

Table 74: Hartford Ridership Fare Distribution by Media Type

Fare Media Type	Percentage of Ridership
Cash	38%
Day Pass	14%
5 Day Pass	3%
31 Day Pass	24%
2 Hour Pass	3%

3 Day Pass	0%
7 Day Pass	2%
10 Ride Ticket	10%
Free (4-Yrs Old & younger)	0%
U Pass (Student discount)	7%
Other	0%

Table 75: Hartford Fare Usage by Minority Vs. Non-Minority

Fare Media Type	Percentage of Usage for Minority Riders	Percentage of Usage for Non-Minority Riders
Cash	80%	20%
Day Pass	78%	22%
5 Day Pass	83%	17%
31 Day Pass	65%	35%
2 Hour Pass	89%	11%
3 Day Pass	87%	13%
7 Day Pass	77%	23%
10 Ride Ticket	68%	32%
Free (4-Yrs Old & younger)	100%	0%
U Pass (Student discount)	82%	18%
Other	56%	44%

Service and Fare Equity Policy

Pursuant to Federal Transit Administration (“FTA”) Circular 4702.1B and Title VI of the Civil Rights Act of 1964, and their related regulations, the following is the policy of the Connecticut Department of Transportation (CTDOT) for service and fare equity analyses and determination of disparate impact and disproportionate burden.

Disparate impact refers to a facially neutral policy or practice that disparately affects members of a group identified by race, color, or national origin, when the recipient’s policy or practice lacks a substantial legitimate justification and when there exists one or more alternatives that would serve the same legitimate objectives but with less disparate impact on the basis of race, color, or national origin.

Disproportionate burden refers to a facially neutral policy or practice that disproportionately affects low-income population’s more than non-low-income populations.

Major Service Change Policy

All proposed service changes, both reductions and/or expansions meeting the definition of a “Major Service Change” are subject to a Title VI Service Equity Analysis with the exceptions outlined in the Service Equity Analysis section of this policy. CTDOT will conduct a public hearing prior to presentation of the proposal to the Commissioner of Transportation for approval and implementation actions.

CTDOT defines a major service change as any service change meeting at least one of the following criteria:

- Route restructuring actions resulting in at least a 20% change in overall route length.
- Service frequency changes that results in a 25% or more change in annual revenue vehicle miles (RVM). Annual RVMs are a compilation of weekday and weekend RVMs.
- A service change adding or reducing service to a fixed guideway station resulting in a greater than 25% change in service at the station.
- Service change actions resulting in at least a one-hour change in service span.

Service Equity Analysis

A Service Equity Analysis will be conducted whenever CTDOT proposes a major service change to the rail or bus system as defined in the policies provided above; providing these changes will remain in effect in excess of twelve (12) months. When a service change is proposed, there shall be a twelve-month look-back, to determine if the aggregate of any changes in the prior twelve (12) months would have triggered one of the major service change criteria.

The following service changes are exempted:

- Standard seasonal variations in service: a seasonal route or routing variation is usually a modification to service to provide “added” access that is not broadly needed year-round, or the discontinuation of same. Any temporary service addition, change, or discontinuation of a route with the intention that it will be in operation for less than twelve months. While all changes from regular service to seasonal service and the reverse are exempt, should there be changes within the seasonal service from one year to the next, CTDOT will conduct a SAFE analysis should the change exceed fifty percent (50%), regardless of increase or decrease in service;
- Changes on routes serving sporting events, special events, or service contracted through other cities or agencies;
- Any service change that does not meet the definition of a major service change such as minor route alignments, frequency, span, or time point adjustments; route or bus stop changes due to temporary road detours caused by construction, maintenance, closures, emergencies, labor disruptions or strikes, fuel shortages, or safety concerns; etc.

Fare Equity Analysis

A fare equity analysis will be conducted whenever CTDOT proposes a fare change, regardless of the amount of increase or decrease.

For proposed fare changes CTDOT will –

1. Determine the number and percent of users of each fare media proposed for increase or decrease;
2. Review fares before the change and after the change;
3. Analyze the fare media generated from ridership surveys indicating whether minority and/or low-income riders are disproportionately more likely to use the mode of service, payment type, or fare media proposed for change;
4. Compare the impacts for each particular fare media between minority users and overall users;

5. Compare the impacts for each particular fare media between low-income users and overall users; and
6. Identify alternatives and mitigation strategies when the impacts exceed the thresholds established with the disparate impact and disproportionate burden policies.

A fare change is defined as an increase or decrease in fares: (a) on the entire system, (b) on certain transit modes, or (c) by fare payment type or fare media. The exceptions are as follows:

1. “Spare the air days” or other instances when a local municipality, the State or CTDOT has declared that all passengers ride free;
2. Temporary fare reductions that are mitigating measures for other actions (i.e. construction activities that close a segment of the rail system for a period of time); or
3. Promotional fare reductions that last less than six (6) months.

FTA Circular 4702.1B states that a recipient can implement a fare increase that would have a disproportionate or adverse effect provided that it demonstrates the action meets a substantial need that is in the public interest, and that alternatives would have more severe adverse effects than the preferred alternative.

Disparate Impact/Disproportionate Burden Policy

The purpose of this policy is to establish thresholds which identifies when adverse effects of a major service or fare change result in a disparate impact to minority populations, or a disproportionate burden to low income populations.

The Department applies the Disparate Impact Policy and the Disproportionate Burden Policy uniformly to all major service and fare changes regardless of mode.

Major Service Changes

A major service change to the rail or bus system will be deemed to have a disparate impact on minority populations or a disproportionate burden on low income populations, if the percentage of riders or vehicle revenue hours on affected minority-classified or low-income classified routes is at least fifteen (15%) percent higher than the percentage of riders or vehicle revenue hours on non-minority-classified or non-low income classified routes affected by the major service change.

Fare Changes

A fare change will be deemed to have a disparate impact on minority populations or a disproportionate burden on low income populations if its implementation results in either:

1. When one fare change is proposed, the percentage of impacts of the proposed fare change borne by minority or low income riders as a result of the proposed fare change is at least ten (10%) percentage points higher than the percentage of impacts of that proposed fare change on the overall rider population; or
2. When more than one fare change is proposed:
 - a. For each fare change in the package: the percentage of impacts of each individual proposed fare change borne by minority or low income riders as a result of the proposed fare change is at least ten

(10%) percentage points higher than the percentage of impacts of that proposed fare change on the overall rider population; and

b. For the total package of fare changes: the aggregate percentage of impacts for the proposed fare changes borne by minority or low-income riders as a result of the proposed fare changes is at least five (5%) percentage points higher than the aggregate percentage of impacts on the overall rider population.

FTA Circular 4702.1B states that a recipient can implement a fare change that would have a disproportionate or adverse effect provided that it demonstrates the action meets a substantial need that is in the public's interest and that alternatives would have more severe adverse effects than the preferred alternative. A copy of the resolution signed by Commissioner Joseph Giulietti can be found on page 631-632 of the CTDOT FTA Title VI Program Appendix.

Service and Fare Equity Policy Public Engagement

In previous years the Connecticut Department of Transportation (CTDOT) conducted public hearings to consult with the public as part of its process to adopt new service and fare equity policies. Due to the unpredictable impacts of COVID-19, CTDOT was forced to conduct all public outreach using virtual platforms available to the Department. The following activities were undertaken to publicize the draft Service and Fare Equity Policy and to advise the public of their opportunity to comment during the public comment period, from July 1, 2020 – August 14, 2020. It is important to note that although the Department did not host public hearings, CTDOT received more comments on the proposed policy than in previous years. The number of comments and engagements demonstrates that the methods used were more effective in reaching the public than traditional public hearings. CTDOT also partnered with CTtransit, CTrides and Metro-North Railroad (MNR) to reach riders.

A [webpage](#) dedicated to the proposed Service and Fare Equity Policy was developed and a link was posted on the homepage of the CTDOT website. During the 45-day comment period, the webpage had 974 unique visitors, with 80% of the visitors entering the CTDOT website directly from the Service and Fare Equity (SAFE) webpage.

The SAFE webpage hosted the following:

- DRAFT Service and Fare Equity Policy;
- DRAFT Service and Fare Equity Policy (Spanish);
- [Service and Fare Equity Policy Informational Module](#);
- Voluntary Feedback Survey;
- Instructions on how to submit comments; and
- “For additional information, or free language assistance, please call (860) 594-2109” in twelve languages (Spanish, Simplified Chinese, Italian, Portuguese, Polish, Russian, Haitian Creole, Arabic, French, Hindi, Korean and Vietnamese).

The Office of Contract Compliance (OCC) utilized the “CTDOT Resource Directory for Community Outreach and Employee Referrals” directory to conduct targeted outreach to organizations that serve minority, low income, and/or limited English proficient (LEP) populations. Emails were sent to

announce the availability of the SAFE webpage and the start of the comment period, as a reminder of the opportunity to submit comments, and a final reminder a couple of days prior to the close of the comment period. On each occasion the distribution list included over four hundred (400) organizations including community and faith-based organizations, educational institutions, libraries, and Neighborhood Revitalization Zone (NRZ) leaders.

Additionally, a press release was issued announcing the launch of the webpage and the dates of the public comment period. Richard Andreski, Bureau Chief for the Bureau of Public Transportation, and Debra Goss, the Department's Title VI Coordinator participated in an interview with an editorial writer for online publication, [CTPost](#).

In addition to conducting the outreach detailed above, CTDOT partnered with *CTtransit*, *CTrides* and Metro-North Railroad (MNR). The sizable networks of each organization offered CTDOT an opportunity to largely extend its reach. An outline of the outreach conducted by each organization is detailed below.

CTtransit

Interior notices regarding the availability of the draft policy and the opportunity for public comment were placed on board buses, along with a QR code where riders could access the SAFE webpage directly from their mobile device.



Image 1: Interior Notice (English)

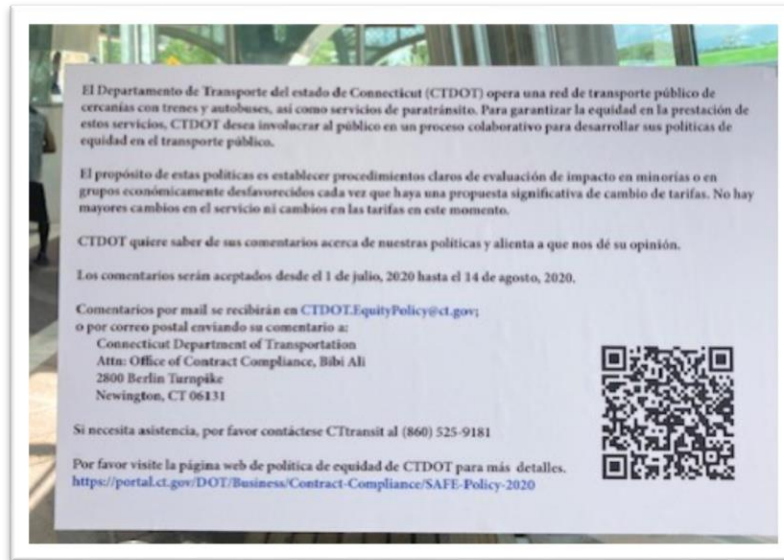


Image 2: Interior Notice (Spanish)

Additionally, CTtransit posted a link to the SAFE webpage on their website and generated social media posts using Facebook and Twitter. With each of the six (6) social media postings, CTtransit had the opportunity to reach over two hundred (200) riders, and ultimately had eighty (80) engagements.

CTrides

CTDOT has developed a family of commuter services designed to meet the needs of Connecticut commuters. *CTrides* helps commuters find the best way to get to work or school and offers information and resources for travel options throughout Connecticut. *CTrides* has an extensive social media presence and reaches both rail and bus riders statewide. During the public comment period, *CTrides* generated seventeen (17) social media posts using Twitter, Facebook, and Instagram. In total, tweets were seen over 1,000 times, and Instagram and Facebook posts had more than 120 engagements.

Metro-North Railroad

Metro-North Railroad (MNR) has an extensive email distribution list of over 10,000 people. Over the course of the public comment period, MNR sent six emails advising the public of the availability of the draft policy for review, and the opportunity to comment. On average, each email reached over 13,000 recipients.

Voluntary Feedback Survey

CTDOT included a voluntary feedback survey on the SAFE webpage. The survey was generated to measure the public's opinion of the draft policy and the informational module. The survey included demographic questions to measure the success of CTDOT's targeted outreach efforts. A summary of survey results are provided below:

- 82% of respondents rated the informational module as fair or higher;
- 75% of respondents felt the module provided a sufficient amount of detail;

- 83% of respondents felt the module was easy to navigate;
- 72% of respondents thought the draft Service and Fare Equity Policy was easy to understand;
- 75% of respondents were made aware of the availability of the webpage through social media or email;
- 12% of respondents are of Hispanic origin;
- 25% of respondents self-identified as minority; and
- 49% of respondents had an annual income of less than \$50,000.

Comments and Policy Changes

During the public comment period, most of the questions/comments were related to issues outside of the SAFE policy. CTDOT received one comment related to the major service change policy expressing concern that a 25% change in overall route length was too high of a threshold and could have serious implications on transit riders. In response to the comment CTDOT revisited the potential impact and a determination was made to reduce the percentage from 25% to 20%.

Future Service and Fare Equity Analyses

The Connecticut Department of Transportation (CTDOT) will conduct a Service and Fare Equity Analysis for any proposed fare changes and/or major service changes, as defined by the Service and Fare Equity (SAFE) Policy.

CTDOT will utilize the process detailed below:

1) CTDOT will develop a narrative of the proposed fare and/or major service change(s). These narratives are prepared as part of the normal service review process and analysis of proposed changes, or as part of the financial analysis package for a proposed fare increase that is done as part of the budgeting process.

2) CTDOT will analyze the proposed major service and/or fare changes to determine if the change results in a disparate impact or disproportionate burden as defined in the Department's SAFE Policy. If a disparate impact or disproportionate burden exists, based on the established thresholds within the SAFE Policy, CTDOT will examine whether alternatives exist to maintain the effect of the proposed major service and/or fare change(s), while taking steps to avoid, minimize, or mitigate disparate or disproportionate impacts where practicable.

Should an alternative not be practicable or available that avoids, minimizes, or mitigates the disparate impact or disproportionate burden, an explanation and justification of the proposed changes will be prepared to present to the public. In the Service and Fare Equity Analysis – Final Statement of Impacts and Mitigations, CTDOT will clearly state whether the proposed changes would result in a disparate impact on the basis of race, color, or national origin; and/or a disproportionate burden on the basis of income and detail any mitigation efforts.

3) CTDOT will conduct a comprehensive community outreach process, to provide the public with an opportunity to provide input, suggest alternatives, or request clarification on all proposed major service changes and/or proposed fare changes.

The Connecticut Department of Transportation will issue a news release announcing the public hearings. The news release will include the dates and locations of each hearing and will be posted to the CTDOT website at least two weeks prior to the public hearings. In addition to the press releases, legal notices will be published in newspapers; and interior notices announcing the public hearings and the opportunity for public comment will be placed on board buses and at New Haven Line and Shore Line East rail stations as appropriate for the changes proposed.

Targeted outreach to minority, Limited English Proficient (LEP) and low-income communities will be utilized to ensure inclusive public participation. The Department will employ the following engagement strategies:

- Engage Community Based Organizations (CBOs) and Faith Based Organizations (FBOs): CTDOT will email the SAFE Analysis and a copy of the news release announcing the public hearings to all identified CBO/FBOs in the impacted service area(s); or to all CBO/FBOs statewide for proposed fare changes. The email will request that the organizations share the information with their constituents and will provide contact information for requesting free language assistance.
- Community/Neighborhood Meetings: CTDOT recognizes the importance and effectiveness of meeting residents where they are. CTDOT will request to be added to agendas of established community and neighborhood meetings to present the SAFE Analysis and advise the public on how they can submit comments.
- Social Media: Social media has become a cornerstone of effective communication. Facebook and Twitter will be used for announcing public hearings and notifying the public of the public comment period. CTDOT will ask stakeholders, including community and faith-based organizations to share this information on their own social media platforms. The Department will keep in mind that this outreach tool is only reaching those with access to the internet.
- Limited English Proficient (LEP)/Safe Harbor Maps: The public hearing notices are considered vital documents and the CTDOT will adhere to its Language Assistance Plan (LAP) to ensure that Limited English Proficient (LEP) populations within the affected service area(s) are informed of the proposed major service or fare changes and can participate in community discussions. The Department will include information in the identified safe harbor languages in the targeted service area(s), on how to request free interpretation and translation services of documents describing the proposed changes and the SAFE analysis.

In addition to contacting the CBOs and FBOs the Department will provide this information to all Regional Planning Organizations (RPOs). During the two weeks leading up to the public hearings, the Department will periodically send reminders and any updates to all CBOs, FBOs and RPOs.

During the hearing the Department will explain the purpose of the hearing and the proposed changes. CTDOT will discuss strategies to minimize and mitigate any disparate impacts or disproportionate burdens identified during the analysis (should any exist). The moderator will open the hearings to provide the public with the opportunity to submit comments. All comments pertaining to the proposed changes will be documented and addressed as appropriate for the final hearing record.

After all scheduled public hearings have been held, a final email will be sent to CBOs, FBOs, RPOs, and individuals who provided an email on the public hearing sign in sheet, thanking those who attended. The

email will provide details on how to submit comments during the comment period for those who were unable to attend, or unable to provide comments during the hearings.

4) CTDOT will review all comments and feedback received during the public comment period and make any necessary revisions to the proposed changes. If the proposed major service changes and/or fare changes must be implemented, despite disparate impacts or disproportionate burdens, the Department will demonstrate that it has a substantial legitimate justification and has analyzed the alternatives to determine that the impacts of the proposed service and/or fare changes have been minimized to the extent possible.

Service and Fare Equity Analyses

In 2018 the Department conducted a Service and Fare Equity Analysis on proposed major service change to the rail system and proposed statewide fare changes for bus and rail services. The Service and Fare Equity Analysis completed in April 2018, can be found on pages 633-744, of the CTDOT FTA Title VI Program Appendix. The Department did not implement the proposed major service changes or fare increases.

Distribution of State and Federal Funds Analysis

As part of its Title VI Program covering January 1, 2017 – December 31, 2019, CTDOT conducted an analysis of capital investments to determine if any disparate impacts exist in the Department's distribution of funds.

There are many factors that drive public transit capital project spending including, grant awards for infrastructure improvements, property ownership, ridership, and the nature and concentration of the fixed guideway infrastructure. Additionally, the age and condition of the fleet impacts the planned purchase of new capital equipment, as well as 'aged equipment' phase out and/or refurbishment programs. All of these are subject to available funding which may be limited by budgetary constraints.

This three year look back period is only a snapshot of capital spending for transit projects. Capital projects often take far longer than three years for design and completion. In many cases the infrastructure will have a useful life that spans decades. For example, the 'Hartford Line' Rail Service project (est. 2018), completed its environmental impact statement in 2012, its design phase was completed in 2014 and track improvements will be ongoing through 2020.

Capital investments are an integral part of the state's Strategic Long-Range Transportation Plan. As such, on-going capital investment is required for equipment purchases, facilities repair, other support structures, and state of good repair programs. These capital investments are evaluated either through the CTDOT's Title VI engagement and planning process for siting new facilities or through service monitoring, which is done every three years to determine if any disparate impact or disproportionate burden exists within our program. If any analysis finds that a disparate impact or disproportionate burden exists, CTDOT will review the issue to determine if the burden/impact can be avoided or mitigated.

Capital Analysis Methodology

An analysis was performed on all rail and transit service area census tracts within, and/or intersected by, the transit buffer zone to classify tracts as minority or non-minority. The buffers used for this analysis are reported in Table 76.

Table 76: Transit Buffers

Service Type	Buffer
Rail Service	2.5 Miles
Express Bus Service	2.5 Miles
Local Weekday Service	0.25 Miles
Local Weekend Service	0.50 Miles
Deviated Fixed Route Service	0.75 Miles

Census tract information was extracted from ACS 2013-2017 Minority table B03002. The total census tract population from the ACS table was subtracted by the total non-Hispanic Caucasian population to determine the total minority population for each census tract. The total minority population was then divided by the total population for each census tract to determine the minority percentage of each census tract. CTDOT compared the average minority state population (33.323%) against the minority population percentage of each census tract. When a tract within the service area has a minority population percentage higher than the state average 33.323%, it was identified as a minority serving tract in this study.

When designating an entire transit system (i.e. The New Haven Line) as a minority or non-minority serving system, the Department follows federal guidance which uses a 33.33% threshold. Under the federal standard, if the total number of minority serving census tracts for a given service area is more than 33.33% (or 1/3) of the total number of number of tracts in that system, then then the entire transit service is designated as a minority serving system.

To determine the distribution of funds spent on public transit capital projects, CTDOT totaled the capital expenditures by each service system area (i.e. Shore Line East, CTtransit Hartford Division, New Haven Line, etc.). To the extent possible, the amounts spent within minority serving tracts are compared to amounts spent in non-minority serving tracts to determine if there is any disparate impact in the Department's distribution of funds.

Rail Distribution of Capital Funds Analysis and Conclusion

During the three year look back used for this analysis (January 1, 2017 – December 31, 2019), \$1,141,740,338.42 was spent on rail transit capital projects that serve population areas with a minority population percentage higher than the state average of 33.323%. During the same period, \$8,175,773.39 was spent on rail transit capital projects that serve population areas where the percent of minority residents is lower than the state average. Thus, CTDOT spent 99.29% of all capital rail transportation funding on rail transit projects along minority serving lines.

In the state of Connecticut, the majority of our urban centers have a higher proportion of minority residents when compared to the more sparsely populated suburban centers. CTDOT's rail service areas include several urban population centers with a high proportion of minority residents. Capital project spending generally occurs at higher rates in these areas as they have higher density populations which

better support transit service initiatives. It should be noted that within a given system (Shore Line East, etc.) rolling stock improvements benefit all passengers within the total service area.

CTDOT has no finding of disparate impacts in its distribution of funds for rail capital project funding.

Bus Distribution of Capital Funds Analysis and Conclusion

During the three year look back used for this analysis (January 1, 2017 – December 31, 2019), CTDOT spent \$314,966,459.14 on bus transit capital projects that serve population areas where the total percentage of minority residents is higher than state average of 33.323%. During the same period, CTDOT spent \$8,698,041.73 on bus transit capital projects that serve population areas where the minority population is lower than the state average. Thus, CTDOT spent 97.31% of all capital bus transportation funding on bus transit projects which serve population centers where the minority population percentage is higher than the state average of 33.323%.

In the state of Connecticut, the majority of our urban centers have a higher proportion of minority residents when compared to the more sparsely populated suburban centers. CTDOT's bus service areas include some suburban centers, but the vast majority of *CTtransit* services emanate from the State's urban population centers. These urban areas have a higher proportion of minority residents. Capital project spending generally occurs at higher rates in these areas because they have higher density populations which better supports transit service initiatives. It should be noted that within a given system (*CTtransit* New Haven, etc.) rolling stock improvements generally benefit all passengers within the total service area.

CTDOT has no finding of disparate impacts in its distribution of funds for bus capital project funding.

Overall Conclusion

Overall, public transit capital spending for CTDOT state and federally funded projects totaled \$1,473,580,612.68 for the reporting period. \$1,456,706,797.56 was spent on public transit capital projects that serve population centers where the total percentage of minority residents is higher than the state average of 33.323%. Additionally, \$16,873,815.12 was spent on public transit capital projects in service areas where the percentage of minority residents was less than the state average. CTDOT spent 98.85% of all capital public transportation funding on public transit projects that reach a high proportion of the state's minority residents.

This finding is reasonable and consistent with the State's demographics and comports to the mission of CTDOT. The state's general transportation priority is to deliver a high quality, safe, multimodal transportation system. To achieve these goals, CTDOT generally seeks to maximize efficiency which often means investing strategically in more densely populated areas. In the state of Connecticut, many of the urban and/or more densely populated areas also have a higher proportion of minority residents than more sparsely populated suburbs.

As a result of the data presented, it is clear that CTDOT's capital investments in the rail and bus systems are accessible to a large proportion of the state's minority population. CTDOT has no finding of disparate impact through the bus or rail capital project funding.

Maps highlighting CTDOT's distribution of funds for completed and planned facility improvements can be found on pages 91-95 of the CTDOT FTA Title VI Map Appendix.

Statewide Planning Process - Identifying the Transportation Needs of Minority Populations

Existing (codified) Activities: The Connecticut Department of Transportation employs several mechanisms to engage minority populations in the planning process to identify their needs. The Department's primary procedures for public involvement are the Department's Public Involvement Procedures (PIP) document. This document is intended to provide the framework for an early, often, and continuous public involvement process. The PIP has been updated in 2020.

Current Activities (Ongoing update of the Statewide Transportation Improvement Program (STIP) and the Public Involvement Procedures (PIP) document): The 2021 Draft Statewide Transportation Improvement Program (STIP) and the updated Public Involvement Procedures (PIP) document recently went through a public involvement process. Listed below is the extensive public outreach conducted.

CTDOT Homepage: A direct link to the STIP and PIP webpages (2021 STIP and Public Involvement Plan - Public Review Procedures) was added to the Department's homepage under *Most Popular* during the public comment period on the STIP and PIP.

STIP Webpage: The STIP webpage of the Department's website includes:

- Narrative of the development of the Draft STIP;
- Information on the opportunities for public involvement;
- Links to the virtual public informational meetings;
- Instructions for individuals with limited internet access;
- Instructions on how to request language assistance;
- Instructions on how to submit comments;
- The draft 2021 STIP document;
- The draft 2021 STIP project list;
- The draft 2021 Multi regional project list;
- The most recent bridge report;
- The most recent safety list;
- Copy of the press release;
- Link to the draft Public Involvement Procedures (PIP); and
- Link to the Air Quality Conformity Determination reports.

Press Release

- A Press release was developed and posted to the Department's website;
- An alert was sent to 875 subscribers, including all news outlets statewide

DOT Calendar of Events

- The virtual public informational meeting on the STIP and PIP was added to the Department's and State's calendar of public events.

Brochure -1

- A brochure was developed outlining the availability of the draft STIP and PIP (both online and in the office), notification of public meetings and how to access the live events. The brochure provided detailed instruction on the ways the public could request additional information or comment on the documents. This brochure was forwarded to the following:
- Eight Metropolitan Planning Organizations (MPOs) and two Rural Planning Organizations (RPOs). These entities forwarded the brochure to:
 - All chief elected officials;
 - Transportation committee members, if applicable;
 - Transit districts in their area;
 - Stakeholders, and
 - Interested parties' lists.
- 180 Community and Faith Based Organizations; and
- All Connecticut Legislators, Connecticut Congressional Delegates, and Connecticut Agency Heads.

Brochure – 2

- A second brochure was developed reminding the public of the continued availability of the draft STIP and PIP (both online and in the office). Additionally, the brochure advised the public that the comment period was still open and encouraged continued public comment until October 9, 2020. This brochure was sent to:
- 180 Community and Faith Based Organizations; and
- *CTtransit*, *CTrides* and all Transit districts for posting to their social media platforms, on their buses, their operator websites and direct email lists.

Advertisement

The CTDOT developed an advertisement for the virtual public informational meeting on the draft STIP and PIP and sent it to twenty newspapers, statewide. The MPOs also developed an advertisement or a legal notice for their virtual public informational meeting on their TIP, along with CTDOT's STIP and PIP and sent it to area newspapers for their Region. These newspapers, used by the CTDOT and the MPOs are listed below:

- Bristol Press
- CT Post
- Danbury News Times
- Greenwich Time
- Hartford Courant
- Inner-City News *
- Inquiring News *
- La Voz Hispana *
- Manchester Journal Inquirer
- Meriden Record
- Middletown Press
- New Britain Herald
- New Haven Register

- New London Day
- Norwalk Hour
- Norwich Bulletin
- Stamford Advocate
- Torrington Register Citizen
- Waterbury Republican
- Willimantic Chronicle
- La Tribuna*
- Northeast Minority News*
- Hartford News *
- Identidad Latina*
- White Eagle *
- El Sol *

*denotes newspapers targeted to reach minority populations

Social Media

- An announcement of the public meeting on the STIP and PIP was posted to the Department's Twitter page.
- WestCOG included announcements on Facebook, Twitter and LinkedIn referencing their TIP and provided a link to their webpage which provided links to the STIP and PIP.
- CNVCOG and SECCOG included an announcement of the public meeting on their TIP and our STIP on their Facebook account.

Virtual Public Informational Meetings

The Department held two virtual public informational meeting sessions on the draft STIP and PIP, September 23, 2020 at 1:00 pm and at 7:00 pm.

- Three methods to participate were provided – Microsoft TEAMS Live event, YouTube, and a conference call in number.
- Closed captioning was available in multiple languages.
- The live event was streamed on CT-N.
- Approximately thirty-six (36) people attended the 1:00 pm event and sixteen (16) people attended the 7:00 pm event.
- Three options were available to provide questions and comments during the live event – by a dedicated email box, by a dedicated voicemail, or by using the chat box in MS Teams.
- The email and voicemail options were available until the close of the public comment period on October 9, 2020.
- A recording of the live event is included on the Department's virtual public informational meeting library located on its website.

Coordination with the Metropolitan Planning Organizations

- As requested by the CTDOT, the STIP and PIP documents were made available for public review in the MPOs offices and on their websites, throughout both the Department's and MPOs respective public comment periods.
- As requested by the CTDOT, the state's eight MPOs included the review of the STIP when they advertised their review of their TIP and their public meeting was for both the TIP and STIP.
- All MPOs included a link to the Department's STIP/PIP website on their website.
- The eight MPOs and the two Rural Council of Governments forwarded our brochure to their first elected officials, transit districts, stakeholders and interested parties list.
- The eight MPOs included announcements of the availability of the STIP/PIP in their quarterly and/or monthly email newsletters.
- CTDOT staff attended all Public Informational meetings on the STIP/TIP held by the MPOs.
- As defined in each MPO's Title VI, Public Involvement Plan, and LEP Plan, legal notices/advertisements were published in required languages: English, Spanish, Polish and Chinese (specific to each MPO).

Comments received and addressed on the STIP and PIP

- The Department did not receive any comments on the PIP.
- The Department received 103 questions/comments on the STIP. Ninety-two (92) were associated with the Cribari Bridge project in Westport, CT. Also received were six transit related questions/comments, three project specific related questions/comments and one comment that was project specific and included maintenance questions. All questions/comments received were responded to, and appropriate CTDOT contact information was provided.

Procedures to Ensure Nondiscriminatory Pass-through of FTA Financial Assistance.

CTDOT is permitted to retain up to fifteen (15) percent of the state's fiscal year apportionment of 5311 program funding for state administration, planning and technical assistance and up to ten (10) percent of the fiscal year apportionment of 5310 program funding for state administration, planning and technical assistance.

CTDOT uses these funds for staff, support costs associated with managing the grant programs, and to provide technical assistance to subrecipients and grant applicants. Examples of assistance include:

- Conducting site visits and desk reviews.
- Meeting with the staff of providers and applicants to clarify requirements.
- Obtaining and updating the required assurances and documentation.
- Developing grant application to FTA.
- Developing and monitoring the grant agreements with grantees
- Preparing required reports to FTA.
- Providing technical assistance.
- Updating the State Management Plan.
- Legal advertisements and room rental costs for applicant workshops.
- Conducting requests for proposals.

To assist applicants, the applications and the instructions for these programs provide guidance to assist eligible subrecipients in applying for operating, administrative, capital, and/or training assistance. The information provided by the applicant is used by CTDOT to evaluate, approve and prioritize proposed projects, and to incorporate them in CTDOT's applications to FTA for funding.

Section 5310

CTDOT seeks to ensure that all eligible applicants are informed of the availability of the grant. The annual grant application is posted on Biznet/CTsource, the State of Connecticut's procurement portal. Information about how to access the annual grant application is distributed in the following ways:

- Interested parties can sign up on BizNet/CTsource for notification;
- Flyer emailed to previous applicants, including those that serve predominantly minority populations;
- Flyer emailed to Community Based Organizations (CBOs) and Faith Based Organizations (FBOs);
- Flyer emailed to Regional Council of Governments for distribution; and
- CTDOT maintains an email list of those organizations interested in the funding.

Applications for Section 5310 funding require the applicant to estimate the number of individuals in the following demographic categories that are eligible to receive service:

- Black
- Asian/Pacific Islander
- Hispanic
- American Indian/Alaskan Native
- Other

Depending on the type of project, the estimate may be based on actual client records or census data for the service area. Applicants must explain the data source being used to capture this demographic information (i.e. current client base; census data for the service area; or some other source).

The demographic data submitted as part of the application is also used to determine whether applicants that serve minority populations are being reached. If applications from organizations that serve minority populations are not received, additional research is required to determine why there were no applicants serving minority populations, including a review of the application process and outreach to make sure the process itself is not a barrier. CTDOT will then make additional targeted outreach to further assist organizations that serve minority populations or adjust the process to remove any barriers.

As indicated in the Section 5310 State Management Plan, ridership demographics and race/ethnic data are part of routine project monitoring and quarterly reporting. To verify compliance during site visits, staff reviews how the grantee provides information about the services they provide' how they inform people of their rights under Title VI; and how they put into practice their public participation plan and language assistance plan.

Criteria for Selecting Projects

In selecting Section 5310 recipients, CTDOT works cooperatively with regional councils of governments and area agencies on aging to ensure the equitable distribution of grant funding throughout the State. As part of the development of the locally coordinated human services – public transportation plan, CTDOT worked with stakeholders to develop uniform prioritization criteria to be applied statewide. These were developed and were extensively reviewed and amended by the stakeholders. Projects are evaluated using the following criteria (not in priority order):

Traditional Section 5310 Projects

1. Legal Notice, Complete Application and Submission Deadline. Application must be submitted prior to the deadline, signed and completed entirely, with one Legal Notice published within the required timeframe.
2. Eligibility for Replacement. Vehicle proposed for replacement must be four (4) years old or have 100,000 miles for vans and minivans and five (5) years old or have 150,000 miles for buses and minibuses or, have documentation of excessive maintenance costs. Equal consideration will be given to applicants who do not have a vehicle to replace but are expanding service or starting a new service.
3. Planning Process. Priority will be given to nonprofit organizations and local municipalities whose project serves a priority target group (individuals with disabilities, older adults, and people with low incomes, as defined by FTA C 9070.1G) and fills a gap identified in the LOCHSTP process.
4. Limited English Proficiency. Priority will be given to applicants that describe how people with Limited English Proficiency will be informed about the service.
5. Utilization of Equipment. Effective utilization of the equipment should be demonstrated with reliable estimates of the number of individuals that will receive service, and the total number of passenger trips to be provided. Priority will be given to vehicles that will be utilized evenings, weekends, out of region, more than six hours per day, and/or are available for a coordinating entity.
6. Degree of Need in the Applicant's Proposed Service Area for Transportation Services. Clear demonstration of the lack of accessible transportation through existing public and private transportation providers.
7. Coordination. Priority will be given to applicants that coordinate with another organization on providing more/expanded service, use of the vehicle, client transport, driver training, fuel purchase, etc.
8. Transportation Budget. Priority will be given to applicants that can attest to and correctly demonstrate having sufficient matching dollars to provide the local match, as well as enough operating income to cover estimated operating expenses.

For organizations that have operated vehicles under this program in past years, CTDOT applies the following additional criteria:

- A review of quarterly operating reports.
- A review of vehicle maintenance/inspection reports.
- The past cooperation of the organization with the Department during the application and operating processes.

Other (Nontraditional) Section 5310 Projects

The proposed strategy must:

1. Serve the target population categories and address an identified gap.
2. Achieve efficiency in service delivery.
3. Not replace other funding programs or resources.
 - a. If the strategy has been funded in prior years by a different resource, in order to be eligible for FTA funding programs, the strategy must have been rejected for future funds or had funding for the specific strategy reduced.
4. Be able to start up in a reasonable period of time.
5. Provide regional/geographical equity.
 - a. Each community should be able to share in the benefits from these funds.
6. Maximize the use of available local, state and federal-funded public transportation resources.
 - a. This will allow CTDOT to make use of resources already in place and will prevent the creation of a secondary layer of services.
7. Be subcontracted with a subrecipient that has the technical and managerial capabilities to conduct the project.
8. Have appropriate resources available to provide the service.
 - a. This would include wheelchair accessible vehicles and could possibly include resources such as dispatch capabilities or other resources as determined by the strategy.
9. Have an adequate plan to make the target population aware of the available service.

Extra credit points may be earned if the strategy (a) provides continued operating funding for a service which is already in operation; (b) provides a service where or when no other service is available; (c) has matching funding available from sources other than CTDOT or US DOT funding; (d) coordinates with other public and private programs to maximize resources and (e) attain any other regionally determined productivity measures.

Projects included in the Program of Projects (POP) submitted to FTA for approval and funding are jointly selected by CTDOT and the regional councils of governments, based on a score compiled from the evaluation criteria. Applicants whose scores result in a tie are more closely assessed in terms of need and the potential impact to the proposed service area (how many people would be served, operating hours and days, etc.) to determine how to refine, detract or award more points to break the tie.

A copy of the Department's Traditional 5310 Grant Scoring Sheet can be found on page 745 of the CTDOT FTA Title VI Program Appendix. Additionally, a listing of funding requests received from private nonprofit organizations, State or local governmental authorities and Indian tribes during the reporting period can be found on pages 746-769 of the CTDOT FTA Title VI Program Appendix.

Maps reporting the towns served by 5310 vehicles can be found on pages 96-98 of the CTDOT FTA Title VI Map Appendix.

Monitoring

As part of our monitoring of Section 5310, CTDOT prepares maps of towns served by Section 5310-funded vehicles. These are reviewed with the Office of Contract Compliance to assure coverage of low-income and minority areas. If there are low-income or minority areas that are not being served CTDOT will reach out to the regional council of governments, municipalities, CBOs and FBOs for assistance in identifying eligible organizations. CTDOT will make more targeted efforts to identify and assist organizations that serve minority and low-income populations. CTDOT also keeps track of repeat applicants that are not funded due to low scores. Program staff offer those applicants a comprehensive review of what a high-scoring application would include. That review is followed up with an email to reiterate what was discussed.

Section 5311

CTDOT conducts a Transit System Audit of Section 5311 subrecipients on a triennial basis. Prior to the audit, the subrecipient completes a questionnaire. CTDOT then conducts an on-site visit in which follow-up questions are asked, pertinent documentation (i.e., policies) is reviewed, and a bus ride checklist is completed. A final report is prepared and issued to the subrecipient noting any findings, with the required submission of a corrective action plan addressing each finding to bring the subrecipient into compliance.

As part of Transit System Audits, subrecipients are also required to provide their Limited English Proficiency (LEP) Plan which requires them to perform a four-factor analysis. Additional Title VI related information is also verified during Transit System Audits including, but not limited to: the subrecipient's Title VI Plan; Title VI Complaint Procedures; Title VI postings on the schedules and on the vehicles visible to the passengers; and what efforts are made to hire DBE firms.

CTDOT solicits Section 5311 grant applications every four years. The most current cycle was in the Spring of 2020, and the previous cycle was in the Spring of 2016. There were no Section 5311 funding requests received during the reporting period of January 1, 2017-December 31, 2019.

A copy of the Department's 5311 selection criteria and methodology for distributing funds can be found on pages 770-772 of the CTDOT FTA Title VI Program Appendix.

Procedures to Provide Assistance to Subrecipients/Efforts to Assist Applicants who Serve Predominantly Minority Populations

CTDOT maintains a record of all requests for 5310 Elderly Individuals and Individuals with Disabilities and 5311 Rural and Small Urban Area Formula Funding. The record identifies applicants that use grant program funds to serve minority populations and low-income populations. The record also identifies which applications were and were not funded. These records are reviewed by FTA at every State Management Review.

Section 5310

The Section 5310 grant program provides formula funding to States for the purpose of assisting private nonprofit groups in meeting the transportation needs of older adults and people with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs. The funding allocated to large urbanized (over 200,000) areas can only be used for projects in those areas. Funding allocated to small urbanized (50,000-200,000) areas and rural (<50,000) areas cannot be used in large urbanized areas. The program aims to improve mobility for seniors and individuals with disabilities by removing barriers to transportation service and expanding transportation mobility options. This program supports transportation services planned, designed, and carried out to meet the special transportation needs of seniors and individuals with disabilities. Projects that are awarded funding must be derived from the locally coordinated public transit – human services transportation plan.

Eligible projects include both “traditional” capital investment (vehicle grants) and “nontraditional” investment beyond the Americans with Disabilities Act (ADA) complementary paratransit services. 49 U.S.C. Section 5310 requires that 55% of funding be used for traditional vehicle grants to non-profit agencies or municipalities to meet the transportation needs of the elderly and persons with disabilities. The balance of funds these can be used for nontraditional projects, such as:

- Travel training
- Volunteer driver programs
- Improving signage, or way-finding technology
- Incremental cost of providing same day service or door-to-door service
- Mobility management programs
- Expanding services to areas where no service exists

On an annual basis, CTDOT opens the application cycle and keeps it open for a minimum of three (3) months. CTDOT has a one-page application notice that briefly explains the program and how to apply. When distributing the application notice, the Office of Transit and Ridesharing uses contact lists for community and faith-based organizations that are kept up to date by the Office of Contract Compliance. The application notice is distributed by email to prior recipients, interested parties that have asked to be included in the distribution, community and faith-based organizations, transportation providers, and Regional Planning Organizations (RPOs). The application is also posted to Biznet, which is a state administered portal for information on state contracts, solicitations, and vendor information.

The annual application process is conducted in cooperation with RPOs throughout the state. CTDOT and the RPOs assist potential applicants through the application process.

The RPOs, most of whom also have metropolitan planning responsibilities and Title VI pass-through responsibilities under the statewide metropolitan planning program are familiar with the local human service agencies who are the targeted subrecipients of 5310 grants. The RPOs reach out to local agencies and are familiar with the needs of Title VI and Environmental Justice communities in their service area. The RPOs will submit an analysis of their outreach efforts as part of the application review package discussed below.

The CTDOT website includes a [webpage](#) on the Section 5310 program. This page provides application information and explains the reporting requirements. The CTDOT staff is available by phone or by email to provide technical assistance to applicants completing the application. At the request of a potential applicant, the Department will review any section of the application prior to submittal to make sure the proposer understands what is required.

The RPO and CTDOT separately review each application to ensure that all required documentation has been submitted. If there are any issues that require a resolution before the application can be reviewed, CTDOT will notify the applicant.

CTDOT provides a rating criterion to be used to select projects for participation in the program. The applications are reviewed separately by the local RPOs and by CTDOT, each using the established evaluation criteria. The RPOs submit their list to CTDOT, and the two lists are compared, any discrepancies in scoring are discussed and reconciled to create a single prioritized awards list for all of the regions. Applicants are notified of grant approval/denial in writing.

CTDOT reviews the list of applicants annually for those that consistently fail to achieve the score required to receive a grant. CTDOT proactively reaches out to applicants that serve minority populations to provide them with guidance on how to prepare a more successful application.

During TIP/STIP approval, a list of approved projects is provided for review and comment.

Section 5311

The Federal Transit Administration (FTA) Section 5311 program makes federal funds available to the states to assist in the development, implementation and promotion of public transportation systems in rural and small urban areas, using a population-based distribution formula. The goal of the program is to:

- Enhance the access of people in non-urbanized areas to health care, shopping, education, employment, public services and recreation.
- Assist in the maintenance, development, improvement, and use of public transportation systems in non-urbanized areas.
- Encourage and facilitate the most efficient use of all transportation funds used to provide passenger transportation in non-urbanized areas through the coordination of programs and services.
- Assist in the development and support of intercity bus transportation.
- Provide for the participation of private transportation providers in non-urbanized transportation.

Every four years CTDOT solicits Section 5311 Grant Applications from current Section 5311 Subrecipients and private bus companies operating intercity service in non-urbanized areas. The grant application is posted on the CTDOT website for public view. Entities that are not current recipients are welcome to submit their proposal and complete an application.

CTDOT staff is available to provide technical assistance to help applicants to complete the application; this assistance is available by via phone, email or in person at the applicant's office. Prior to the submittal due date, CTDOT sends an email reminder and makes follow-up phone calls to subrecipients to answer any questions about the application process.

In the Section 5311 grant application, subrecipients must provide data indicating the percentage of minority, low income and LEP populations they serve. Upon receipt of applications, CTDOT reviews each application to ensure that the application has been completed correctly and the required documentation has been submitted. Subrecipients are notified that they are required to address any outstanding or pending issues with their application that was determined necessary by CTDOT. CTDOT also offers to meet with the subrecipients to go over their application to make sure they understand what is required. If after review, the completed application is approved by CTDOT, a letter is mailed to the applicant notifying them of their approval.

For over three decades CTDOT has provided Section 5311 operating and capital funding to five (5) rural transit districts. On an annual basis CTDOT seeks proposals from Intercity Bus Service providers as required by the Circular 9040.1F. The Department does not limit which rural areas may submit proposals for rural demonstration project funding. Because 5311 funding is not growing at a level that would allow for increases in service, CTDOT prioritizes continuation of existing services over introducing new services. If increased federal funding levels are provided, applications would be solicited by CTDOT for feasibility of implementation.

CTDOT invites and encourages rural transit operators to participate in Quarterly Transit Meetings. These meetings are facilitated by CTDOT staff, and attendees include rural and urban transit districts, private bus operators, and other interested parties. Information is disseminated to participants on a broad range of transportation issues, such as, budgets, insurance, bus operations, capital equipment, service enhancements, and federal/state program regulations. They also serve as an opportunity for transit operators to bring forth and discuss any issues affecting their agency or bus services being provided to the general public.

Through the Section 5311 grant application process, CTDOT requires applicants to describe their public involvement efforts and community outreach.

Each Section 5311 subrecipient is required to have a public participation plan in place which is reviewed and approved by CTDOT. The public participation plan contains information to assist with engaging minority, low income and LEP communities. Strategies may include:

- a) Scheduling meetings at times and locations which are convenient and accessible for minority, low-income and LEP communities;
- b) Employing different meeting sizes and formats;

- c) Coordinating with community- and faith-based organizations, educational institutions, and other organizations to implement public engagement strategies that reach out specifically to members of affected minority, low income and/or LEP communities;
- d) Radio, television, or newspaper ads on stations and in publications that serve LEP populations. Outreach to LEP populations could also include audio programming available on podcasts; and
- e) Providing opportunities for public participation through means other than written communication, such as personal interviews or use of audio or video recording devices to capture oral comments.